Systems and Supports to Develop Indigenous Educators

A LANDSCAPE ANALYSIS

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About Region 16 Comprehensive Center

Region 16 Comprehensive Center (R16CC), a network of 29 educational service agencies in Alaska, Oregon, and Washington, is a responsive and innovative partner guided by the needs of educators and communities to improve the quality and equity of education for each student. We engage state, regional, tribal, school, and community partners to provide evidence-based services and supports. R16CC's innovative model creates better networks of services and supports for students, staff, families, and educators.

Acknowledgments

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Executive summary

Education Northwest conducted a landscape analysis to support the Region 16 Comprehensive Center in gathering information about promising practices and innovative strategies for recruiting and retaining Indigenous educators in teacher education programs (TEPs) and the workforce. This landscape analysis included a review of the literature; a review of enrollment and graduation data from TEPs across the country (publicly available from the U.S. Department of Education through Title II of the Higher Education Act); and interviews with scholars, experts, and program administrators who were conducting research around supporting Indigenous educators or were working in TEPs that enrolled or graduated high numbers of Indigenous students. The report is intended to provide insights and recommendations for Tribes, TEPs, schools, districts, regional entities, and state agencies with a focus on three research questions:

1. **How can TEPs successfully recruit and retain Indigenous students?**
2. **How can schools and districts successfully recruit and retain Indigenous educators in the workforce?**
3. **How can these findings inform ongoing and future work in Washington State?**

Recruiting and retaining Indigenous students in TEPs

Relationships play a critical role in supporting Indigenous educator recruitment and retention in TEPs

- Authentic, two-way partnerships with Tribes, Indigenous communities, and Indigenous organizations can support Indigenous students and faculty in TEPs, facilitate students' transition into the workforce, and support advocacy efforts around Indigenous education.

- TEPs can support students' who maintain relationships with their home communities through updates to the academic calendar, funds for travel, and opportunities for remote learning and student teaching placement in students' home communities.

- Indigenous students are supported by programs that build community and ensure that staff and faculty build relationships with students.

- TEPs' recruitment efforts are more successful when they build on relationships with schools, students, and communities (i.e., word-of-mouth

and network- and Tribal-based messaging and advertising). Additional strategies may be needed for advanced degree programs.

Direct student support can remove barriers to ensure Indigenous student success in TEPs

- TEPs increase access to well-funded Indigenous-centered programs by supporting Indigenous students with streamlined, flexible application processes.

- Robust financial support (i.e., a stipend, dependent support, funds for travel, books, materials, and emergency aid) is essential to ensure Indigenous students enroll and succeed in TEPs.

- Academic, emotional, and basic needs supports are needed to ensure Indigenous students can remain enrolled as they navigate challenges.

- TEPs can ensure that Indigenous students have positive, supportive practicum and student teaching experiences.

Culturally responsive TEP design and strong infrastructure support Indigenous students, faculty, and staff

- Indigenous faculty and staff should be engaged in program planning, including curriculum design and recruitment, and compensated for their time spent on this work.

- Culturally affirming program design, curriculum, and supports that reflect the Indigenous students' cultural values, histories, and ways of knowing support both recruitment and retention.

- Faculty and staff need access to professional development around culturally responsive teaching, equity, and Indigenous culture to provide effective support to Indigenous students.

- Early warning systems ensure that programs identify students who need additional support and prevent situations that may otherwise lead a student to drop out.

- TEPs can benefit from gathering feedback from Indigenous students and using this information to guide program improvements.

TEPs can support Indigenous students' transition into the workforce

- TEPs can support students' successful transition to the workforce by ensuring they are prepared with concrete instructional tools and classroom experience.

- TEPs can support Indigenous educators in navigating the licensure process and selecting from various job opportunities.

- TEPs can support graduates during the first years of teaching through learning communities, mentoring, and creating online communities for alumni to connect.

Recruiting and retaining Indigenous educators in schools and districts

Recruiting and retaining Indigenous educators through Grow Your Own programs

- Districts can support classified staff with obtaining teaching credentials by offering financial support, partnering with TEPs to offer programs in students' home communities, and providing alternative pathways to certification.

- Districts can support Indigenous high school students by offering dual enrollment in educator programs and paid internships, and by partnering with TEPs to provide learning communities and cohort models that support students as they transition from high school to college.

Centering Indigenous culture can help with Indigenous educator recruitment and retention in the workforce

- Districts highlight Indigenous culture, culturally sustaining learning, and their overall supportive environment when engaging with candidates.

- Indigenous educators remain in communities that center Indigenous culture in the curriculum and partner with Indigenous communities to share cultural knowledge.

Supportive administrators and a culturally affirming climate can bolster district efforts to recruit and retain Indigenous educators

- The most important strategy for recruiting and retaining Indigenous educators is a livable wage.

- Schools and districts support retention through supportive, transparent leadership and a culture of continuous improvement centering Indigenous culture and students.

- Districts cast a wide net and build relationships with Indigenous educators early in their education pathway to support recruitment efforts.

- Districts can bolster retention through access to ongoing learning and professional development for Indigenous and non-Indigenous educators.

- Districts can offer mentoring, coaching, and learning communities to support new educators with the transition into the workforce.

Contents

Chapter 1. Introduction

In Washington State, nearly 6 percent of students identify as American Indian or Alaska Native (AIAN), including AIAN students that identify as Hispanic and two or more races (2020–21 student and educator data, Office of Superintendent of Public Instruction [OSPI] Office of Native Education [ONE][1]) and these students attend schools staffed by an educator workforce that is primarily White (87 percent of Washington State teachers), and very rarely Native (1 percent of Washington State teachers; Washington State Professional Educator Standards Board, 2021). The shortage of Native teachers is particularly dire in the wake of the COVID-19 pandemic at a time when districts across the country are facing educator shortages across subjects, positions, and grades (Jotkoff, 2022). Moreover, teachers of color, teachers on reservations, and teachers in high poverty and rural school districts are planning to leave the profession at the highest rates—a pattern that will disproportionately affect Native students (Walker, 2021).

The purpose of this landscape analysis is therefore to provide the Region 16 Comprehensive Center with findings around systems and supports to develop Indigenous educators. We focused on addressing the following research questions:

1. How can teacher education programs (TEPs) successfully recruit and retain Indigenous[2] students?
    a. How can TEPs support Indigenous educators with the transition into the workforce?

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[1] A 2019 report from OSPI ONE found that federal reporting requirements undercount AIAN students by excluding those that identify as Hispanic or two or more races. In the 2019 report, only 1.3 percent of students identified as AIAN–Non Hispanic, and 4 percent of students identified as AIAN–Hispanic or two or more races. https://www.k12.wa.us/sites/default/files/public/communications/2019-12-UPDATE-The-State-of-Native-Education.pdf

[2] We use the term "Indigenous" in this report to refer broadly to individuals and communities that identify as American Indian/Native American, Alaska Native, Native Hawaiian, First Nations, and Aboriginal Australians, as the literature review and interviews encompassed findings from the United States (including Alaska and Hawai'i), Canada, and Australia.

b. What resources do these TEPs need to be successful in their efforts to recruit and retain Indigenous students and support their transition to the workforce?

2. How can schools and districts successfully recruit and retain Indigenous educators in the workforce?

a. How can schools and districts support Indigenous educators with the transition into the workforce?

b. What resources do schools and districts need to be successful in efforts to recruit and retain Indigenous students and support their transition to the workforce?

3. How can these findings inform ongoing and future work in Washington State?

States, districts, K–12 schools, and institutes of higher education need to develop and expand the Native educator workforce in order to ensure that Native students and communities have access to a high quality, culturally affirming education and to support Tribal educational sovereignty, self-determination, and nation building. Some districts and postsecondary institutions are working to build the Indigenous educator workforce through promising practices and innovative strategies in recruitment, education, placement, and retention. These practices were the focus of this landscape analysis.

Methodology

Education Northwest used a multipronged approach to gather information from the field about systems and supports to develop Indigenous educators. In the first phase of the project, we scanned the field by conducting a review of the literature and a secondary analysis of data from TEPs across the country. Through our scan of the field, we refined a list of experts and drafted interview protocols. Then, in the second phase, we gathered information and context through interviews with 10 experts in districts, TEPs, and other organizations working to support Indigenous educators. This approach is described in more detail below.

Phase 1. Scan of the field

Literature review

To identify promising practices from the literature, we co-developed a search strategy with collaboration from the Region 16 Comprehensive Center. The search strategy identified the following keywords: Indigenous peoples, Native American, Native Alaskan, Native Hawaiian, Pacific Islander, recruitment, retention, teacher education programs, educator, teacher, paraeducators, educational staff, educational leadership, principal, superintendent, pathways, transition, and school placement. These terms were used in isolation and combination in Google Scholar, Academic Search Premier, ERIC, and LexisNexis Academic. In addition, we conducted a targeted search on American Indian and Alaska Native (AIAN) resources, including the [Native Indian Education Association](#) or the [Alaska Native Knowledge Network](#). We searched for English language articles published since 2000, including empirical papers, qualitative research and case studies, initiatives, legislation, white and gray literature, and dissertations. We did not restrict the geographic focus and included findings from other countries (e.g., Canada and Australia). We screened the search results based on their relevance for the following three topics:

1. Recruiting and retaining Indigenous students in TEPs

2. Recruiting and retaining PK–12 teachers, paraeducators, educational staff, and leadership in the workforce

3. Pathways, transitions, and placements from TEP to PK–12 schools

We then used the snowball method, prioritizing resources from Indigenous scholars. To do this, we reviewed each article from the search using screening criteria listed above, reviewed the references in the articles that met the screening criteria, and screened those articles until we reached a saturation point where no new articles were revealed. At that point, we compiled a final bibliography for a detailed review.

The literature review resulted in a scan of 21 articles and four TEP models found via AIAN resources and Google Scholar. Of these articles, 14 focused on preparing Black, Indigenous, and people of color educators in TEPs, and eight focused on recruitment and retention within the educator workforce. Five articles discussed best practices for Grow Your Own (GYO) programs. An annotated bibliography is provided in appendix A.

Secondary analysis of TEP data

To supplement the literature review, we conducted an analysis of data from Title II of the Higher Education Act[3] to examine enrollment and completion rates of TEPs across the country in the most recent year of data (2018–19 at the time of this report). This analysis focused on two questions:

1. Which TEPs had the highest enrollment rates and percentages of AIAN students?

2. Which TEPs had the highest completion rates for AIAN students?

This analysis allowed us to identify programs that are most successful in recruiting and graduating Indigenous educators. These programs were included in the outreach for interviews. For detailed information about the secondary analysis methods and findings, see appendix B.

Phase 2. Expert interviews

After reviewing the literature and data from the TEPs, we compiled a list of scholars, experts, and program administrators who were researching support for Indigenous educators or working in TEPs that enrolled or graduated high numbers of Indigenous students. We also developed a culturally responsive semi structured interview protocol with topics drawn from the literature (see appendix C). With collaboration from the Region 16 Comprehensive Center, we reviewed the interview protocols and list of experts and identified and addressed gaps in topics of expertise through expertise within our team and the Region 16 Comprehensive Center. We then co-developed an outreach strategy for contacting potential interviewees, prioritizing Indigenous scholars and experts. We then reached out to potential participants to request their participation in the landscape analysis. Education Northwest conducted one-hour interviews with 10 individuals at TEPs (including Indigenous-focused TEPs within larger colleges and TEPs in Tribal colleges), school districts (including State-Tribal Education Compact Schools in Washington State), and entities that support Indigenous educators and Tribal colleges (see appendix D).

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[3]States annually report key elements of their teacher preparation programs and requirements for initial teacher credentialing under Title II of the Higher Education Act on a state report card designated by the secretary of education. Data are available here: https://title2.ed.gov/Public/DataTools/Tables.aspx

Report outline

In Chapter 2, we present findings from the interviews aligned with the first research question on recruiting and retaining Indigenous students in TEPs and provide recommendations for expanding supports for Indigenous students in TEPs. Chapter 3 presents findings around GYO programs that allow districts and TEPs to collaborate on efforts to recruit Indigenous educators working and living within Indigenous communities and provide recommendations for developing and expanding Indigenous-student focused GYOs. Chapter 4 presents findings related to the second research question on supporting Indigenous educators within the workforce and recommendations for increasing supports for Indigenous educators within the workforce.

Chapter 2. Recruiting and retaining Indigenous students in TEPs

This chapter highlights promising practices, innovative strategies, and solutions to challenges faced by TEPs working to recruit and retain Indigenous students. We discuss recruitment and retention strategies collectively because they are often tightly interrelated. This section begins with a summary of findings around the relationships TEPs should cultivate to support Indigenous educators before, during, and after they enroll, followed by a summary of student supports that can remove barriers for Indigenous students in accessing and completing TEPs, key elements of infrastructure needed to support the success of Indigenous students, and strategies TEPs can implement to support Indigenous students as they transition into the educator workforce. This chapter closes with recommendations for Tribes, TEPs, regional and state agencies in their work to recruit and retain Indigenous students in TEPs.

Relationships play a critical role in supporting recruitment and retention for Indigenous students

Across interviews, participants emphasized the importance of building authentic relationships with Indigenous communities, faculty, staff, and students. These relationships can bolster outreach and recruitment efforts, ensure programs are designed thoughtfully and intentionally around the needs of Indigenous students, and serve to support Indigenous students while they are enrolled.

Relationships with Tribes, Indigenous communities, and Indigenous organizations

Participants shared the importance of building authentic, two-way relationships with Tribes, Indigenous communities, and Indigenous organizations as they develop strategies for recruiting and retaining Indigenous students. Through these partnerships, TEPs can "honor the communities where people are coming from [...] empower teachers and students to really see themselves as working with their own communities and owning their own stories." Participants highlighted the common

goals shared by TEPs and Tribes around recruiting and retaining Indigenous educators and discussed how this can support partnerships that benefit everyone. Although these partnerships are essential, participants noted that they can be challenging for predominantly White institutions that promote a "Eurocentric" worldview. One participant shared that this can be a new approach for many programs,

> *"When we design programs, it always comes from the 'expert' point of view, and we're not given the opportunity to involve the community in that and help them help us develop in a way that's congruent to what they need."*
>
> – *Lakehead University Indigenous TEP faculty member*[4]

Some TEPs have established formal relationships with Tribes through advisory boards and memorandums of understanding. One TEP has a Tribal advisory council with most of the Tribes in the state represented. These Tribal partners can engage in outreach and recruitment, inform curriculum design and program planning, and support students with preservice training and the transition to the workforce. Participants shared that these relationships benefit from formalizing the partnership with letters of support or memorandums of understanding that describe the nature of the partnership (e.g., quarterly meetings on specific topics, how guidance from advisory board will be used) and protect staff time allocated to building and maintaining relationships.

Participants shared the importance of ensuring that the needs and expectations of Tribes are met through these partnerships. One participant discussed their approach as,

> *"Promoting our programs in a culturally respectful way that would build bridges between our organization and the communities. ... What can we do to serve you? What can we do to help you accomplish your goals?"*
>
> — *Lakehead University Indigenous TEP faculty member*

One program includes regular trips for Indigenous students to visit reservations in the region where they meet with Tribal education staff, learn from the Tribe, and see how

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[4] While the confidentiality of our study participants is paramount, one TEP faculty member from the Lakehead University Indigenous TEP requested that their quotes be attributed directly to their program.

the Tribe works locally with school districts. Students have the opportunity to begin making connections in the workforce, and Tribes can lay the groundwork for their own educator recruitment efforts.

Advisory groups within TEPs can also advocate for state-level changes to support Indigenous students and educators. For example, these groups can support the development of alternative teaching pathways for Indigenous educators that remove some of the barriers along the pathway. As one participant shared,

> *"That's where we can have political support to say like we need alternative teaching pathways for our educators and other educators because these barriers are reducing access for Indian children to have Indian teachers."*

This fosters an equal partnership because the faculty in the TEP can develop research briefs, presentations, and webinars for the Oregon Department of Education to support ongoing work with the Tribes. As described by a participant,

> *"In our faculty, our specialists in Indian education … they can write … some really well-written material that maybe the Tribes don't have the time or the manpower to put together themselves, but we can call each other and have that working relationship and support each other—it's a collective of partnering to try to increase access for teachers."*

In addition to developing relationships with Tribes, TEPs can form relationships with other Indigenous organizations to support students with resources and training. For example, University of Alaska Southeast partners with the Sealaska Heritage Institute to provide students with classes in Indigenous art taught by Indigenous experts.

Relationships with students' home communities

Participants discussed the challenges their Indigenous students face with leaving their home communities and support systems. As one participant shared,

> *"One of the things that I've seen stay fairly consistent is that people have family obligations or community obligations that make it hard to step away to step into college and the demands of college. So, I think early on what stood out to me was a number of students having a sense of almost guilt that they weren't home helping. Some of them have subsistence harvesting or just the role that they play within family support."*

Participants described the following strategies their programs implemented to support students' frequent and sustained connection to their home communities:

- Updating the academic calendar: One TEP shifted the spring semester back a week to accommodate an annual event held each January and moved the fall semester up two weeks to allow students to stay home between the November and December holidays to minimize cost and disruption. The participant shared that their goal is to make it easier for students to travel home safely and spend quality time with their support system.

- Creating opportunities for students to attend remotely: One program is establishing relationships with schools in students' communities so they can complete student teaching and practicum experiences in those settings. Another program is increasing online offerings so students can complete one or more semesters remotely. One participant shared that these remote options can accommodate working students and students with families if they include appropriate support, such as access to devices and hot spots and virtual resources for mental and behavioral health, advising, and tutoring. Students also benefit when faculty are trained in best practices for online education and when they engage in virtual communities of practice.

- Offering financial support and flexibility to allow students to return home as needed: One program has an emergency aid program to support students with returning home for emergency situations, family/community obligations, or when they experience homesickness. Another has worked with faculty to ensure they respond in a compassionate and flexible way to students who need to return home during the semester.

One participant shared how they are working with Tribal colleges and community colleges to expand two-year programs into four-year programs to increase the number of four-year programs available to students in their own communities. This participant shared, "Students will have a higher potential to thrive if they don't leave their home community."

Relationships among Indigenous TEP students

The literature review identified Indigenous cohorts as a key strategy for supporting students. "Building an Indigenous-centered learning community places the needs of Indigenous teacher candidates at its core, fostering a sense of community and

belonging among students to combat feelings of isolation and alienation, while enveloping them in a support network of Indigenous teachers, mentors, and advocates" (Landertinger et al., 2021, p. 44).

Participants all referenced the importance of creating a community that feels like family and building spaces for students to collaborate, support one another, and socialize. For primarily White institutions, it was particularly important to dedicate resources to have a space for Indigenous students to gather with one another. Some had created spaces on campus like a Native studies center to house these gatherings. These centers could hold regular social events for Indigenous students to build community and host celebrations or events for the entire campus to attend and learn about Indigenous culture, foods, and arts from Indigenous students and faculty. One participant described the value of these events, saying,

> *"[At] harvesting time there are traditional foods made available, special events to draw students together, and I think that goes a long way to create a space where students can turn and connect if they choose. Just being able to taste some of our traditional foods, [build] meaningful connections and forging new relationships has really filled a void. With that comes compassionate understanding of what they're facing if we do have a student who's extremely homesick or not adapting."*

Some participants shared that small program and class sizes and a small student-to-faculty ratio foster a close-knit environment that helps students feel at home. At larger schools, this can be done through small, specialized programs for Indigenous students and cohort models to create a long-lasting community of support and collaboration. As one participant shared,

> *"One of the things that have made a tremendous difference, and we can see it in our data trends, is that the school has some programs that are cohort design programs, and those have been the most successful. What I've seen and then heard from students is the difference that makes. In essence, you're in it together, you're being challenged together, there's a lot of teamwork embedded in the strategies used in the classroom, and the most important piece, I think, is that relationships are forged. … I've spoken with students who … maintain those relationships and always have someone that they can connect with even though that person might be teaching in a different district, a different part of the state."*

Cohort models can be a particularly powerful strategy for Indigenous students in two-year programs who transfer to four-year institutions. Participants shared that while two-year colleges and Tribal colleges in students' home communities can be a supportive place for many Indigenous students, transferring can deter students from completing their degree or credential. However, cohorts or communities of practice that continue with the transfer to a four-year institution allow students to enter the new institution with a built-in community. This model is supported through close partnerships between two- and four-year institutions and dedicated staff members at each institution to facilitate the cohort program, ensure that credits transfer, and provide advising.

Relationships between faculty/staff and Indigenous students

Many participants described their approach to building relationships with students and opening lines of communication so that students can come to faculty and staff with challenges and barriers they face in their personal and academic lives. A faculty member at the Lakehead University Indigenous TEP described how everyone in the program, including administrative assistants, staff, and faculty, are focused on building personal connections and taking "the extra steps to help [students] feel comfortable and safe."

Another program had a specific set of guidelines for faculty around advising, including social and emotional well-being checks. These guidelines outlined the steps faculty should take in their interactions with students, describing how every appointment should begin with time spent getting to know new students or checking in with returning students, "attending to them as a person before we attend to their academic needs." This participant described the approach as follows,

> *"When they come in, we spend the first half of their advising appointments just, 'Tell me about your grandma; I heard she was sick.' That kind of stuff. 'What's going on back home?' 'Is your car still working?' So we're just making that personal connection and asking them about their interests and telling jokes and making that human connection and really, really doing that in a very purposeful deliberate way because we know that relational connections between people is what really keeps students."*

Participants described TEPs that have allocated funds to hire a support staff person who helps Indigenous students with accessing resources, facilitates conversations between Indigenous students and faculty, and advocates for Indigenous students

across the college. These individuals can also serve as advisors and track student progress or monitor early warning systems to identify students who may need additional support. Participants shared the importance of compensating these staff members and providing them with resources specific to their needs and the needs of their students. Particularly for predominantly White institutions, a person in this role can support the TEP in both recruitment and retention efforts for Indigenous students.

Relationship-based recruitment

Participants described the importance of building relationships that center the needs and preferences of Indigenous communities as a key recruitment strategy for Indigenous students. Across recruitment strategies, programs focused on relational recruitment worked hard to listen to Indigenous students and communities. In addition, some participants shared the value they saw in tracking the effectiveness of different recruitment strategies. One participant described efforts to conduct a historical analysis to monitor which strategies are working. Another program has started asking students where they heard about the program and why they are interested; most students were learning about the program through alumni, and the program is using this information to strengthen alumni outreach.

Word-of-mouth

The most successful strategy noted by participants was word-of-mouth across family, community, and Tribal networks. Through developing programs that celebrate Indigenous culture and support Indigenous students, they find that their graduates return to their home communities and tell others about their experience. As a faculty member at the Lakehead University Indigenous TEP shared, "Word-of-mouth travels like crazy in our communities, and so, if you can give students a positive experience, they'll promote your programs." Programs can foster this strategy by strengthening their alumni network and providing alumni with information and materials to share with their communities.

Staff are also working to expand the word-of-mouth approach to support current students, staff, and faculty with engaging communities and building relationships with prospective students. A faculty member at the Lakehead University Indigenous TEP shared that they take a personal approach to recruitment so that prospective students "feel like they're part of a family, that they're going to be coming into a family." Programs are also working to build relationships with school district

personnel so these educators can share information about the program with their high school students.

Network- and Tribal-based messaging and advertising

Participants also discussed the need to adjust their approach to developing recruitment materials to directly engage Indigenous communities by highlighting the cultural elements of their programs; showcasing their Indigenous faculty, staff, and students; and explaining the supports they offer to students. One participant described how they "shine a light" on the kinds of experiences students will have and the funding opportunities available. Participants share this information through a variety of outlets including:

- Indigenous online communities and social media: One participant described 30-second ads they developed for social media. They then worked to find existing communities on social media—specifically, Facebook—and worked to share the advertisements within those networks.

- High school recruitment fairs and events in Indigenous communities: However, one participant shared that they would like to see this opportunity expanded. They believe it could be beneficial for high schools to host career days focused on education fields so that high school students can meet with and compare different programs and learn about career options across the field. One program also gives presentations to K–12 educators at Indigenous-specific conferences so they can share with graduating students.

- Direct mailing with postcards and posters: One program has found that this strategy works well to recruit Indigenous students because "our communities have different needs and different access … we have our stuff hanging in Tribal post offices and have them in Tribal offices and grocery stores … so that's really important to us to have that printed direct mail material."

Advanced degree program recruitment

For advanced degree programs, including educational leadership programs, relying on existing student networks is key. One program has found success with recruiting through existing affinity groups and supports on campus, such as Indigenous advisors and program managers. Staff described the importance of normalizing the pathway to advanced degrees and ensuring that students see it as attainable. This can be done by sharing alumni stories and discussing the different routes they took.

In addition, students in this program have benefited from support through the application process as described above. Program staff work closely with students to support their transition into the program, particularly for students who may be transferring from a Tribal college into a primarily White institution. They have also developed a cohort within a cohort program for Indigenous students to build community and establish support.

Direct student supports can remove barriers to ensure Indigenous student success in TEPs

The literature review and participant interviews revealed a number of key supports essential in ensuring that Indigenous students can access and succeed in TEPs. These supports begin with the application process and include financial, academic, emotional, and basic needs supports throughout the duration of the program. In addition, TEPs must ensure that student teaching experiences are positive educational experiences for Indigenous students.

Streamlined, flexible application processes

The literature review revealed that alternative admission requirements can benefit Indigenous students. For example, Lakehead University's Indigenous TEP considers relevant life experience to be an acceptable prerequisite if an applicant has not completed 12th grade. Candidates' English and math skills are tested in coursework during the first summer of the program. If students are unable to successfully complete these courses, they are encouraged to take more classes and then reapply to the program (Heimbecker et al., 2000).

Participants also described their approaches to ensuring that the application process is not a barrier for Indigenous students. Some shared how the process is straightforward with one or two pieces of writing and letters of recommendation. Others shared how they work with the college to secure access for students who might not meet eligibility criteria set by the college. One program engaged the Tribal Advisory Council in reviewing applications. This group can promote applications that may not be accepted by the college, and the college can then modify the program plan for that candidate to address gaps in their transcripts or previous coursework. Another

program has a waiver by which students can apply as mature/adult students[5] or students with other life experiences; these students write an essay and admissions evaluates if they can succeed despite a low GPA as long as the right support is in place. The college can modify the program to ensure any gaps in content are addressed.

Robust financial support for Indigenous students

The literature review revealed that removing financial barriers to TEP enrollment and teacher certification is an effective strategy for recruiting Indigenous educators (Becket, 1998; Garcia, 2020; Gist, Bristol, Carver-Thomas et al., 2021; Landertinger et al., 2021; Lansing, 2014). TEPs may waive application and tuition fees, supply students with technology such as laptops, or pay for students' practicum requirements. One example from the literature is University of Arizona's Indigenous Teacher Education Program, which offers the following support for students: $1,700/month living stipend, dependent support, travel stipend to school sites, laptop, books, knowledge and certification exams, tuition coverage, and two years of induction support (University of Arizona, 2022).

Many participants echoed that financial support was the most important factor for student recruitment and retention. They emphasized that students would not enroll without sufficient funding to support them, and often their family members, during the time they are in school. While many Indigenous students have access to "full scholarships," this is not sufficient to cover all costs of enrolling. As one participant explained, a student who received 85% maximum Pell Grant benefits still typically needs around $15,000 to complete their education.

Indeed, all the successful TEPs interviewed offer significant financial support that included not just tuition and fees but living expenses and book expenses. Some programs also provide funds for students to return to their home communities for family circumstances or school breaks, on-campus housing, dependent stipends per child (for students with children), and emergency aid grants. Some participants

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[5] Students that did not meet general admission requirements were eligible to apply as 'Mature/Adult Students' if they had not been enrolled in a full-time education program for at least two years, had completed less than one year of community college, and had never attended a four-year college.

indicated that emergency aid grants are particularly important for increasing retention so students can address issues that might otherwise lead them to drop out.

Across U.S.-based TEPs, financial support is typically provided through the U.S. Department of Education's Indian Education Professional Development program, which requires students to secure teaching positions in schools that serve a high proportion of Native American students within 12 months of completion. If students do not fulfill these requirements, they must pay back the funds. Participants had mixed views on these requirements. One participant thought direct funding would be a better than the public service loans, which can cause stress for graduates. Another participant did not see these requirements as a barrier, saying,

> *"Our students are into teacher education for all the right reasons. They want to go into teaching so that they can undo what they perceived to be some of the injustices of the past .... They want to do this really good work to help save lives in their community and help people to thrive and not to struggle, and so that's what guides them and they're going to do that anyway, so these programs are great because service payback they can end up having all of that financial help with zero debt."*

Academic, emotional, and basic needs support

Many participants shared the importance of providing students with access to resources to support their academic, emotional, and basic needs. Academic support included a learning center with drop-in academic tutoring and learning communities with students and faculty.

Participants shared that students had a much higher need for emotional support in the wake of the COVID-19 pandemic. Supporting students could have a huge impact, as shared by one participant, "The challenges that students face ... I would say the area of grief and loss is tremendous and ... once you establish a sense of safety and high expectations, students just take off." Some programs offer students referrals to counseling and support centers on campus. One participant shared that they have seen success with providing online counseling services for students, which increased accessibility for students on and off campus and provided greater flexibility in scheduling.

The most common basic needs support was for students with families. Many participants shared that they serve nontraditional students who often have children

and other family in their care. They have developed various strategies to support these students. One program secured building access so students can work in the building if they have children at home or no air conditioning. Other programs shared that they invite students to bring children and family members to seminars or offer students a stipend to support child care. Some Tribal colleges are providing free day care for students during class (including evenings) to ensure students can attend and focus on the material.

Highly supported student teaching experiences

Although TEPs can work to provide professional development and training to faculty and staff on campus, Indigenous students may face bias or prejudice when they leave their programs to engage in student teaching or practicum experiences. Participants described some of the approaches they are taking to ensure students experience a supportive, smooth process. For example, one participant described how they screen mentor teachers to ensure Indigenous students are placed in classrooms with teachers who value an Indigenous worldview and who have received training in working effectively with Indigenous students. Another program strives to place students with alumni from the program.

One program supports placing students in their communities for practicum and student teaching with a remote option for attending coursework. Partnerships with Tribes can ensure that students have support and mentoring during these experiences. This has sparked an interest in creating a hybrid program for students who can teach in their communities and take classes virtually. The program graduated three students who completed the program remotely during COVID.

Culturally responsive TEP design and strong infrastructure support Indigenous students, faculty, and staff

Participants shared a variety of ways that TEPs can be structured to support their Indigenous students and increase their recruitment and retention. A faculty member at the Lakehead University Indigenous TEP described their approach to thinking about the program like a client service that centers the needs of students and communities. With this mindset, they have worked to build an Indigenous program from the ground up and then share this model as a marketing and recruiting strategy.

To successfully recruit and retain Indigenous students, participants described the importance of ensuring TEPs have a strong infrastructure. Participants shared that they are more successful in efforts to recruit and retain Indigenous students when they have access to funding and resources for students, dedicated space for students to work or build relationships, departmental and college leadership support for revised/updated curriculum that incorporates revisions to reflect an Indigenous worldview, training and professional development for faculty and staff around Indigenous culture and culturally responsive teaching, support for varied recruitment approaches, and time allocated for developing and maintaining partnerships. These strategies are described in more detail below.

Indigenous faculty and staff engaged in program planning

> *"Attracting and retaining Indigenous teacher candidates means it is necessary to hire and seek guidance from Indigenous faculty, teachers, Elders, traditional knowledge holders, and community leaders.*
> *"(Landertinger, 2001, p. 47)*

Participants shared that Indigenous students are more successful in programs designed to incorporate Indigenous understandings and worldviews through the leadership of Indigenous faculty and staff. Similarly, recruitment efforts are more effective when developed and led by Indigenous partners. As one participant shared,

> *"When we say education strengthens our people... that's what I need the entire College of Ed. to understand. I need everybody in every department to understand the mission of this program. ... I need to be in every meeting... I need to be on all the list serves. ... Everybody has to have a complete understanding in the college."*

Participants shared the importance of having an active role in program and curriculum design, strategic planning, faculty meetings, recruitment efforts, student support, and identifying and planning professional development opportunities for faculty and staff. However, they also shared the challenges of balancing their time to ensure they can serve current students while also contributing to collegewide planning and other activities. One participant described this dilemma, saying,

> *"We have to be really picky on the service work that our staff signs up for because it starts to impact the students in the program and that's who we're really here to serve. So that's something we have to be really cognizant of ... what do we have the bandwidth for."*

This can be addressed by ensuring there are enough Indigenous faculty and staff to engage in service work equitably, fostering a supportive climate to reduce time spent making the case for program improvement and identifying faculty and staff who can be key allies in supporting Indigenous students across the college. In addition to engaging Indigenous faculty and staff, participants also shared the importance of engaging students in program design whenever possible.

Cultural and place-based programming

Several studies highlight the importance of culturally and linguistically responsive curriculum and program design to retain Indigenous teachers in education programs. "Indigenous teacher candidates are more likely to apply to and remain in programs that are culturally, politically, and epistemically relevant" (Landertinger, 2021, p. 45). Centering Indigenous ways of knowing, doing, and being is a core strategy for retaining Indigenous candidates (Landertinger, 2021; Mihesuah, 2004; Villegas et al., 2008; Whitinui et al., 2018). Schools should expand and embrace the cultural wealth of Indigenous teachers by building and sustaining Indigenous languages; allowing students to lose connection to their heritage culture and languages leads to loss of identity (Beaulieu, 2006).

An example of a school that embraces the importance of Indigenous language is the Kahuawaiola Indigenous Teacher Graduate Program Certificate offered through the University of Hawaiʻi at Hilo (Beaulieu, 2006; Landertinger, 2021). The three-semester postbaccalaureate program is housed in the College of Hawaiian Language and delivered primarily in Hawaiian. Graduates are prepared to teach in Hawaiian immersion schools and teach Hawaiian language and culture programs in English medium schools. Graduates are equipped to support Native Hawaiian students and their Hawaiian-speaking families (Beaulieu, 2006).

TEPs and districts may be challenged to find Indigenous faculty immediately available for hire. One TEP that has navigated this challenge is the Nunavut Master of Education in Leadership and Learning program. The program sought Inuit instructors to support program delivery but struggled to identify Inuit instructors who fit the universities' selection criteria for faculty. To address this problem, the program developed a co-teaching model in which Inuit instructors teach alongside non-Inuit instructors who meet the required criteria. After using this approach for the first cohort of master's students, graduates can then serve as instructors and the second cohort receives

instruction from graduates of the first cohort (Landertinger, 2021; Wheatley et al,, 2015).

By engaging Indigenous faculty, staff, and communities, TEPs can create programs that reflect the cultural values, histories, and ways of knowing of Indigenous students to support recruitment and retention. Participants described the challenge and complexity of this shift and highlighted its importance in creating a space where students feel valued, celebrated, and comfortable. At a minimum, participants described updates that TEPs should make to support Indigenous students. Examples of these updates include allowing Indigenous students to personalize their assignments, engaging Indigenous students in experiential learning outside the classroom, developing student-driven research projects, participating in shared learning opportunities with other Indigenous students and faculty, and hosting events to celebrate Indigenous culture and traditions.

However, participants in programs that serve primarily Indigenous students described myriad ways their programs are structured to reflect the values and culture of their students. These programs create courses that center Indigenous languages, seasonal activities, and place-based knowledge from elders and community members. For example, one program has converted standalone science classes to an integrated series of courses built around seasonal rounds called "Integrated Perspectives in Science for Educators." A participant described these courses, saying,

> *"We've completely redesigned all of those courses to be around what we call the seasonal round of the Tribes here, so instead of taking those Western paradigm classes and science, they take classes … built around the lifeways of the local Tribes here, and the way that they interacted with their physical environment including their spiritual environment. … In the fall, for example, coming up at the end of the summer, we'll have our fall series of that class, and in that one, they'll be doing a lot of work with hunting and gathering of animals and plants, and in the process of learning that, they learn the biological principles associated with those animals and plants. They'll learn a lot of biology, but they'll also learn chemistry and also learn physics in the hunting methods that were used by the Tribes here. So. it's [an] Indigenous-centric approach to learning the sciences and not compartmentalized in the Western sense."*

Participants also described how they invite elders and community members into the classroom or bring students out into the community. One participant described how they view this as hybrid teaching in which the college faculty member serves as a

facilitator who supports learning from elders, culture bearers, or community members. The participant shared that this approach aligns with the goals of local communities working to promote Indigenous language and traditions and share cultural knowledge. Another participant described how they engage a respected elder throughout the program to present and provide feedback to students on their presentations and assignments. The participant described how this impacts students, saying,

> *"That's really impactful and important for them; a lot of them said that she you know fills that void of like if they've lost someone or if they don't have that guidance in their own family, they have that elder support from her."*

Participants also shared the importance of incorporating Indigenous languages throughout the curriculum as a key part of "validating a person's identity." This can be done be requiring faculty to know some of the Indigenous languages and inviting community members to provide training on Indigenous languages.

Participants also highlighted the diversity of their Indigenous students, emphasizing that Indigenous culture is not a "monolith." They shared that while it is important to build the curriculum around the culture and values of regional Tribes, their programs also allow freedom and flexibility for students to explore their own identities and what Indigenous culture and identity means to them. They work to "instill that sense of pride in where Indigenous students are coming from" in a way that highlights the diversity of experiences and backgrounds. By changing the curriculum to elevate Indigenous perspectives, participants shared that they are better able to both recruit and retain Indigenous students. One participant shared how prospective students are drawn to such programs, saying,

> *"[They're] going to a place where maybe for the first time ever in an educational context [their] Indian identity is actually celebrated and embraced and not stigmatized. [It] offsets the dissonance that's created by leaving home."*

Some participants discussed addressing historical trauma experienced by Indigenous students. Some participants shared that some students may have lost trust in the educational system but still feel a pull to share their traditions or give back to their community. One participant described how they approach this through "acknowledging the realities of the harms that colonial education has done and recreating it in a way that is really empowering and healthy." One participant described how they strive to empower students to be educator-scholars and create

Indigenous pedagogy that reflects their worldview and builds new education experiences for Indigenous children. A faculty member from the Lakehead University Indigenous TEP explained how a program that successfully trains and prepares Indigenous educators will have a ripple effect into the communities.

Participants also shared the importance of ensuring that students across the college are required to take course content about Indigenous populations, history, and culture. This content is important in providing non-Indigenous educators with skills and knowledge to support their Indigenous students. These students will also be better prepared to support their Indigenous classmates while in the TEPs and in the workforce, ultimately contributing to the retention of Indigenous educators. One participant described how all students (Indigenous and non-Indigenous) benefit from culturally affirming programming because the learning environment is about learning in and outside the classroom, speaking from personal experience, and learning from one another with compassion and understanding.

> *"The culture we teach in our programs would then ripple out and then have an effect on students that they're going to teach."*
>
> —*Lakehead University Indigenous TEP faculty member*

Specialized professional development for faculty and staff

To ensure student interactions with faculty and staff are positive, empathetic, and supportive, TEPs should provide faculty and staff across the college with training and professional development around engaging with Indigenous students. This professional development should be selected and designed in collaboration with Indigenous faculty and staff. Participants shared key topics that include culturally responsive teaching, decolonization, equity, creating a more inclusive curriculum, and understanding the cultural context of the region. They also shared the importance of ongoing and targeted training, including regular meetings through a community of practice, targeted trainings with guest speakers and experts, and experiential learning about the regional culture. One participant described a faculty training in which faculty learned from Indigenous community members about traditional practices for harvesting a plant and turning it into a healing oil. One participant suggested that Tribal colleges could be key partners in developing and offering Indigenous-specific professional development, saying,

"Tribal colleges are uniquely situated to help bring about innovations in teaching and learning in Native communities. … I hope that there's more opportunities for [Tribal colleges] to be able to be included in regional professional development … we'd like to be included in those conversations into the future."

In addition to professional development, participants highlighted the importance of creating time for faculty members in different programs or content areas to collaborate and review how Indigenous education can be embedded across the curriculum.

Early warning systems

Some participants shared the importance of tracking student progress and engaging faculty to allow for intervention and prevention if students are falling behind. Participants described these as early warning systems designed to ensure students are receiving necessary support. One program requires students to send a form to all their faculty requesting information about student progress. Support staff can follow up with students who may be falling behind and facilitate communication between faculty member and student. This can also be an opportunity to build students' professional communication skills and their relationships with faculty. As one participant shared,

"I don't like last minute trying to fix things at the end of the term because it causes them anxiety. If we can catch it before something snowballs into being an issue, then… that's great. That's been our way of [improving] retention."

The progress form also goes to the practicum teacher to provide feedback on the student. If students receive negative feedback, a faculty or staff member can observe and ensure there are no issues of bias or miscommunication for the student. In some cases, this observation reveals that the placement is not a fit for the student, and students can switch to a different practicum placement.

Feedback from Indigenous students for program improvement

Many of the interview participants also described how they gather feedback from Indigenous students and work to continuously improve their programs to meet student needs. For example, one participant shared how student exit surveys revealed

students felt burdened by "chasing down artifacts" for their teaching portfolio. Based on this feedback, administrators created a centralized system and the program maintains the records and builds student portfolios as they progress through their coursework, to which faculty can add comments.

Another participant shared a similar exit procedure in which students share feedback about the program and evaluate the mentor teacher they had while student teaching and their college supervisor. This allows the program to ensure that students work with supportive, culturally affirming mentors.

TEP support for students' transition into the workforce can foster retention

Participants highlighted the unique role that high quality, supportive TEPs can take in ensuring successful transition of students to the workforce after graduation. This begins with ensuring that student training and experiences include concrete instructional practices to use in the field. In addition, TEPs can support students with the processes of licensure and applying for and selecting job opportunities. Finally, TEPs can play a role in supporting their alumni in the first three to five years of teaching.

Workforce preparation

Participants in TEPs and districts expressed that one of the most important ways TEPs can support students with the transition to the workforce is by ensuring they are prepared with tools and classroom experience. TEP participants highlighted the rigor of their programs and the confidence this instills in graduates. One participant said,

> *"They feel that the curriculum is rigorous and that when they finished a class or the degree program, they feel like they can conquer anything, because they've operated in that environment ... it's prepared them with the tools they need."*

Key components of the curriculum highlighted by participants included personalized assignments that can be implemented in the classroom, strategies to foster social and emotional learning and connections with students, and information about the logistics of working in a school. One district participant shared that TEPs should strive

to place students in the classroom whenever possible. The more students experience the classroom, the easier the transition will be.

One participant noted that it can be challenging for Indigenous students to return to their home community and step into a new role. This participant highlighted a need for training and support for students around this transition, saying,

> *"It's a hard road to step in as an Indigenous person work[ing] with Indigenous populations and communities as a professional and ... what might we do to help someone prepare for that. ... It's such a diverse situation that I think there are some areas that could aid in terms of communication and being respectful and knowing the communities' values."*

Licensure and job selection

As students are preparing for graduation, TEPs can support them by assisting with the licensure process and preparing students for applying for and selecting jobs. One participant shared how they support students with applying for licensure by guiding them through the process step by step. Other participants discussed how they support students with preparing for the Praxis or other state licensure assessments. Some programs create opportunities for students to take practice tests or offer training programs to help students pass. One participant shared that this optional opportunity is beneficial for students but would have a greater impact if it were required. Participants also shared that programs can review coursework to see if there are gaps in what they offer compared to the Praxis; they can help students fill those gaps, so they are more prepared.

Other programs support students by advocating on their behalf and working with test creators to revise the test to ensure it is culturally responsive. For example, one program is collaborating with their Tribal advisory council to advocate for changes to the test to remove racially biased questions. One participant shared her experience with the test, saying,

> *"I froze for a while on a question [that] said the Native Americans of Maine experienced a severe population decrease due to [which of the following]: weather and climate ... contact with diseases—it had two other things, ... and it took me like 10 minutes because I'm like, who wrote this question. Maine didn't exist before Tribal people. ... I just lost so much time, and I'm trying to hurry up and get through that test because it's on a time limit. ... So, the racially biased exams having low passing scores for certain populations of*

people who are taking it and that, in turn, affects the license teachers and the state."

The program supports students with an alternative plan where multiple measures are used instead of the Praxis. However, the participant shared that the alternative plan is time intensive for the college and they have limited capacity to support more than three or four students. In addition, the time required to review transcripts and test scores, create the plan, and approve it is not compensated. In the past, candidates could submit a teaching portfolio, which is a better solution.

In addition to supporting students with licensure, some programs provide coaching on interviewing and resume building; however, participants noted that students do not have difficulty finding jobs. It is more productive to help students select a position that will be well compensated and supported. As one participant explained, "What I'm telling my candidates now is, when you're talking to a school, you want to learn about the environment there to see if it's a fit for you, because they want you."

Transitional support during the first years of teaching

Research indicates that mentor support increases the likelihood that educators of color will remain within the profession (Becket, 1998; Carver-Thomas, 2018; Garcia 2020; Gist, Bristol, Flores et al., 2021; Hall, 2012; Reed, 2007). Key practices for effective mentoring programs for Indigenous preservice teachers include encouraging partnerships between Indigenous mentors and Indigenous students (Bristol, 2015); engaging a horizontal mentoring approach in which mentors and preservice teachers view one another as co-learners (Flores et al., 2011); and recognizing the value of Indigenous preservice teachers' racial, cultural, and social identities (Gist, Bristol, Flores et al., 2021) as well as the challenges they may face in traditionally White mainstream classrooms (Anthony-Stevens et al., 2020).

An example from the literature is the Indigenous Knowledge for Effective Education Program (IKEEP) at the University of Idaho, a predominately White institution. IKEEP assigns Indigenous mentors to teacher candidates throughout student tenure at the university. A case study on the program found that IKEEP mentors believed their role necessary to help new students "navigate the politics" of the education system "as they themselves did not feel mainstream teacher education prepared them for the pervasiveness of institutionalized racism in public schools" (Sabzalian, 2019, as cited in Anthony-Stevens et al., 2021, p. 554). In addition, students and mentors alike shared the belief that the partnership cultivated "a community of practice among

Indigenous teachers" (p. 554) to develop the skills necessary to adapt to the changing needs of Indigenous students.

Participants shared the view that if their TEP successfully creates an environment where students feel like family, they will remain part of the family after they leave. As one participant shared, "You cannot hand the degree to teachers and just let them go; you have to stay connected to them for at least the first three years and check in with them and see how they're doing." Programs foster that continued sense of community in different ways.

One program has "quasi-formal relationships" with students for three years after graduation. This helps ensure they do not feel isolated and have access to resources and support. They are also working to create a center for Indigenous teachers at the university or a regional center that provides professional development and a learning community for educators after graduation. Another program facilitates a mentoring program and pays mentors to support graduates for their first two years of teaching.

A third program created a learning community with a mix of new teachers (in their first three years of teaching) and other teachers with experience who can serve as mentors. The group meets regularly to discuss topics of interest such as classroom management, building relationships with families, balancing life and career, logistical aspects of teaching (e.g., unions, retirement etc.), Tribal instructional materials, and online resources. In some cases, new teachers have shared resources and strategies from their TEPs with experienced teachers. The group has also discussed how to advocate for Indigenous education in

districts that do not value that content and pedagogy. Participants shared that this can be a common issue faced by Indigenous educators in rural communities where schools may not want to address biases or support Indigenous educators.

TEPS also support the sense of community in less formal ways. One program created a Facebook page for new teacher graduates to help them stay in touch and share resources. Some programs also stay connected by gathering information from alumni about where they work and, for those who have left the field, information on why they left. One participant shared that through this process, they learned,

> *"The ones that I noticed who left have gone into get their PhDs so they can become administrators or do policy work because they see things at a higher level needing to be addressed or they're working in DHS and they're like*

trying to address other issues or they're taking—they've gone on to Tribal Council because they're trying to address the issues in other places that stem down to the classroom."

Other teachers have left the field due to experiencing bias; having unsupportive administrators, especially principals; and being in a school environment unwilling to have challenging conversations and address issues that arise. This information helps the program advise and guide new graduates as they consider job offers and prepare to enter the workforce.

Recommendations for recruiting and retaining Indigenous students in TEPs

Recommendations for Tribes

For TEPs to successfully recruit and retain Indigenous students, it is essential that they create formal, compensated opportunities for Tribes, Indigenous communities, and Indigenous organizations to engage in authentic two-way partnerships. Tribes can support TEPs in a variety of ways, including the following strategies:

- Build and strengthen partnerships with TEPs through participating on advisory boards, supporting practicum placement opportunities for students, and sharing information about TEPs within Tribal communities.

- Support TEPs with creating supportive and culturally affirming programs through providing input about all components of the program including application processes and admission requirements; academic, emotional and basic needs supports; culturally based curriculum design; and professional development and training topics and providers for faculty and staff.

Recommendations for TEPs

TEPs can implement a variety of strategies to support Indigenous students and create an environment that supports relationship building, removes financial and other barriers to success, provides a culturally affirming curriculum and program design, and supports students' transition to the workforce. Some recommendations for TEPs include:

- Work with Tribes, Indigenous communities, and Indigenous organizations to gather and implement feedback on recruitment strategies, program design and supports for Indigenous students and faculty, and strategies to facilitate students' transition into the workforce.

- Foster students' relationships with their home communities by updating the academic calendar to accommodate annual events, providing funds for travel, and creating opportunities for remote learning and student teaching placement in students' home communities.

- Create spaces and events on campus so that Indigenous students can build community with one another and build relationships with Indigenous faculty and staff.

- Provide professional development and create guidelines for faculty and staff working with Indigenous students to prioritize relationship-building.

- Streamline application processes and create alternate pathways to enroll in programs for students that do not meet admission requirements.

- Ensure that students have access to funding to cover all expenses incurred while attending, provide academic, emotional, and basic needs supports, and use early warning systems to identify students that may need additional support.

- Work with Indigenous partners on and off campus to develop and refine culturally affirming curricula and program design to ensure they reflect the Indigenous students' cultural values, and histories.

- Gather feedback from students to guide program improvements and ensure students have access to supportive practicum and student teaching experiences.

- Support students' transition to the workforce by providing assistance with licensure application and placement and creating opportunities for graduates to connect with mentors and peers.

Recommendations for regional and state agencies

The recommendations for Tribes and TEPs rely on the support and system-level changes at regional and state level within entities such as Educational Service

Districts (ESDs), OSPI, the Washington Student Achievement Council (WSAC), the State Board for Community and Technical Colleges (SBCTC), the Washington Association of Colleges for Teacher Education (WACTE), the Professional Educator Standards Board (PESB), and others. Recommendations for regional and state agencies include:

- Facilitate relationship building across Tribes and TEPs through ongoing statewide advisory groups and convenings.

- Explore and provide robust, secure, flexible funding to support TEP students, create positions for Indigenous support staff, compensate faculty for service work, and facilitate relationships with Tribes.

- Increase flexibility in program development to allow for the creation of coursework that reflects Indigenous cultural practices and knowledge, culturally responsive coursework and assessments, and inclusion of elders and community members.

- Explore alternate options for application, coursework, and certification/licensure to expand access for Indigenous educators.

- Facilitate partnerships with Tribal colleges in the state and the region by supporting TEPs in non-Tribal colleges with attending professional development offered by Tribal colleges, and ensuring Tribal colleges are included in professional development opportunities, working groups, communities of practice, and other convenings. Support TEPs with sharing resources and curricula they are developing to support Indigenous students by housing resource libraries and creating virtual communities of practice.

- Support Tribes and Indigenous communities with access to hot spots and devices so students can more easily learn about education careers and pathways and access online coursework.

- Support TEPs by expanding existing programs that successfully train Indigenous students to provide master's degrees or principal endorsements. Participants shared the belief that more Indigenous educators are needed in leadership roles to "change the landscape of education," and these educators are likely to return to familiar educational settings where they were supported.

Chapter 3. Recruiting and retaining Indigenous educators through Grow Your Own programs

This chapter highlights promising practices and innovative strategies that districts and TEPs can implement to recruit and retain Indigenous educators from and for Indigenous communities. It begins with a summary of findings regarding Grow Your Own (GYO) programs, followed by strategies to support classified staff and paraeducators in pursuing teaching credentials, and strategies districts and TEPs can implement to support high school students in pursuing careers in the field of education. This chapter closes with recommendations for Tribes, TEPs, regional and state agencies in their work to recruit and retain Indigenous educators through GYO programs.

GYO is a successful framework used by TEPs to support the recruitment and preparation of Indigenous educators (Garcia, 2020; Gist et al., 2019; Van Gelderen, 2017). Research shows the GYO framework reduces barriers that traditionally exclude educators of color from entering and persisting in the teacher workforce (Garcia 2020). Key practices for effective GYO programs include bringing education to the students, removing financial barriers, and providing alternative pathways to admission and certification (Landertinger et al., 2021).

Districts can support staff in obtaining teaching credentials

Participants from school districts share a common challenge they face in recruiting and retaining Indigenous educators: the small pool of Indigenous candidates with teaching certifications. Evidence suggests that Indigenous teacher candidates tend to be women in their late 20s and early 30s who have familial obligations and may be challenged to leave their remote communities (Freeman, 2008; Heimbecker et al., 2000; Kitchen, et al., 2010; Landertinger, 2021; Malatest & Associates, 2010; Nunavut Teacher Education Program, 2016). Districts are addressing this challenge through formal and informal GYO strategies focused on supporting their classified staff and paraeducators in pursuing teaching credentials. Districts can provide support in

informal ways through coaching and mentoring, and districts are also exploring partnerships with colleges to develop programs to support members of their communities in obtaining teaching credentials.

Participants agreed that paraprofessionals can be the best pool of future teachers with the right support to complete their associate degree and then their bachelor's degree. Participants emphasized the importance of supporting existing staff in pursuing additional education by allowing them to continue working and making a living wage while enrolled in a TEP. Participants in school districts shared that they are able to successfully hire Indigenous educators into low-paying, classified staff positions, but they need more support in helping these educators obtain credentials needed to fill higher-paying positions with more responsibility.

> *"We've been successful at getting them here, but we haven't been successful taking the next step with supporting their education locally, that's been a challenge. … We kind of have that grow your own type of attitude going on, but we need help with that because we're not able to facilitate that as a small school."*

Participants shared that certification is a roadblock to hiring Indigenous educators; experienced and excellent candidates are precluded from hiring because of lack in credentials. In some cases, districts are forced to employ long-term substitute teachers instead of experienced paraeducators. Many are working to address this issue through informal and formal GYO strategies, but districts face difficulties working within the current system. One participant expressed frustration with these barriers, saying,

> *"Why wouldn't we want to find ways that for people that are well-qualified, that just don't quite have the degree or you know program and [are] working towards it. … I have other people that have bachelor's degree, but they have to get into a program basically to be a teacher and that takes a year and a half to two years and pay for that … so yeah, I don't know, I think, maybe the certification process needs to be looked at."*

Financial and other support

Districts support paraeducators by paying them while student teaching, and one district shared that they pay their teaching certification fee in exchange for a five-year commitment. This district has found that some TEPs will not let their students work during student teaching, whereas others will; they steer their students toward

the programs that will pay them. The inflexibility of some programs creates an equity issue for students who cannot afford to stop working. One participant described the importance of this strategy for paraeducators, saying,

> *"Student teaching is usually an unpaid endeavor, and so what we're trying to do is we're going to snatch up that paraeducator, and we're going to keep paying them during the time that they're doing their student teaching. Because they can't afford to not have the job, and so they're going to have to make a decision, I feed my family or pursue my credentials, and so we make sure that we cover that college prep program."*

Districts can also support paraeducators in pursuing teacher credentials by allowing them release time (i.e., 90 minutes at the end of the day) to do their schoolwork or attend courses and supporting them with assignments designed to be applied in the workplace. A faculty member at the Lakehead University Indigenous TEP shared how this model is designed to "have the teacher training [set up] so that students know you're investing in them, and so there's a payoff for them to help you succeed .... The community support for that kind of learning is essential."

Programs in students' communities

The literature review demonstrated that a key strategy for TEPs to support the recruitment of Indigenous teacher candidates is by offering coursework online or in students' home communities. Some of the most established TEPs in Canada have used this approach (Landertinger et al., 2021). For example, the University of Saskatchewan's (2018a) program has offered community-based coursework since the 1970s and maintains a 90 percent student success rate.

Similarly, University of Nebraska's Indigenous Roots TEP offers blended coursework to paraprofessionals already employed in their community's education system. Students in this program take general education courses and earn an associate degree in their local communities. Once they have successfully completed their associate degree, they are automatically enrolled at the University of Nebraska, where they are able to complete teacher certification with online coursework. The program additionally supports the successful completion of the program by allowing candidates to complete their preservice teaching requirements in their own community (Garcia, 2020). Since its inception in 1999, the Indigenous Roots TEP has graduated 54 Indigenous students into the teaching profession (Apel, 2021). The success of this program is evidenced by a recent grant from the U.S. Department of

Education to expand the program to Indigenous principal and administrator preparation (Apel, 2021).

Participants also highlighted the importance of online coursework that allows students to remain in their home communities. One participant described how their district is working with a regional college to create a local program on the reservation, so students can attend and live at home. The project was delayed due to COVID, but they are now exploring opportunities to offer classes at satellite sites to ensure they can send enough students to make it worthwhile.

Some Tribal colleges are exploring similar approaches by establishing micro centers at local community sites where students can study and attend online courses. This can be particularly beneficial for students with children who may be living in multigenerational homes. At a minimum, these centers provide internet, computers, and a quiet space for students to work on their program. In some cases, the micro centers are staffed with faculty or teaching assistants who can support students with homework; in other cases, the college holds classes there. This was particularly important for paraeducators, as one participant shared,

> *"Paying them a living wage, providing them a place to do their online education, because it's mostly done online when they're paraprofessionals, so providing a space for them to do that either out this micro center or having day care centers open or something so they can address those needs if they have them. But it's really finding out what the student needs are and addressing them."*

Alternative pathways to certification

The literature review indicated that alternative pathways to admission and certification can provide accelerated pathways to teacher certification and support the recruitment of educators of color (Garcia, 2020). For example, Brandon University Program for the Education of Native Teachers is an example of a TEP that supports teacher certification for Indigenous paraprofessionals working in their home communities. The program offers courses on campus from April through July, and candidates apply what they learn in their coursework to their roles as paraprofessionals September through March. The program takes about six years to complete (Landertinger et al., 2021).

One participant described how their TEP offers a community-based cohort specifically for students who are working in schools in roles like educational assistant or language speaker but lack certification. The program was created by school boards that were frustrated they had capable, experienced staff who can teach but lack the necessary certification. This program provides access to a bachelor of education degree with a shortened streamlined process that builds on their experience working in schools.

In addition to supporting paraeducators in pursuing additional education, districts are exploring alternative routes to certification for cultural practitioners. Participants in districts shared how they are creating opportunities for Indigenous community members to be involved in the school through coaching, co-teaching, and facilitating. These approaches mirror traditional community-based education systems in which teachers model learning from each other, and instruction is customized to the local context and needs. Districts can support these educators with their progression through the credential process and provide them with adequate compensation. One district shared that they worked with the state to expand the First Peoples' language, culture, and oral traditions teaching certificate to include fine arts and social studies to allow more of their community members to serve as educators. As one participant shared,

> *"Indigenous perspectives are everywhere, and that's the thing that we have to remember, that culture is not separate, it is the heart of our school, it is everything that we do, and then if your culture is successful, the rest of it will follow."*

Districts and TEPs can develop educator programs for high school students

Districts are also exploring how to support their graduating high school students in pursuing a career in education. As a first step, districts shared their focus on supporting Indigenous students in their K–12 systems, ensuring they graduate from high school. Participants in TEPs and districts shared the focus on sparking students' interest in education as early as possible to grow the teaching workforce. One district described how they are working to create a community young people want to be a part of, bringing them in at entry-level positions and supporting their progression. One participant shared the goal of GYO programs as,

"To get young people, Native folks, to see themselves as educators. … Trying to restore that narrative around who belongs in the classroom and what education is for. … The role that Native educators can play—and community because in a healthy community really everyone is an educator and has a lot of gifts to offer and a lot to teach. I think that you can see the role of education from a lot less oppressive light and more in one that really supports the values of the culture and the values of the community and can help with passing on of language and passing on of the things that are really important to that particular group."

One participant shared that, although graduating students have access to funds for college, the distance to the program is a barrier because of family ties and responsibilities. This participant shared the following example,

"So one young man who's 22 years old wants to be a teacher, but his father has a health condition that he's got to be close to his father. … How do we make that more of a local a program? So those are things that we've kind of challenged the local universities. How can they bring that to the reservation, rather than demanding basically that our graduates go 60 miles one way?"

Some programs are supporting high school students in entering the educator workforce by working with colleges to provide dual credit opportunities in education programs. Similarly, a group of Tribal colleges are working with high school students to engage them in teacher education through a model that has been used in early childhood education and Head Start. Juniors and seniors in high school can work as teaching assistants, and the program includes a paid internship during the summer and a bridge program to support their transition from high school to college. These students can then enter college as part of a community of practice. American Indian Higher Education Consortium is building this "intensive, intentional, supportive environment" model in some Tribal colleges in partnership with the Department of Health and Human Services.

Another TEP has created a regional GYO program with high school students, college students, graduate students, and alumni teachers. This group meets weekly for one hour online (due to COVID). Each session has a 15-minute teacher story and a 15-minute prerecorded mini lesson focused on a problem of practice or an area of expertise or interest from the mentors. In addition, the program invites community members, and each session features elders or experts sharing language and culture; they are building a library of lessons that will be accessible to people considering entering the teaching profession. Because the meetings are online, people can attend

from across the region, and participants represent over 30 different Tribal nations. The program provides incentives, including gift cards and technology support such as laptops and hot spots. A participant described the program as follows,

> *"A 12-week weekly mentorship opportunity for high school students and undergraduate students to meet with alumni mentor teachers subsequently teachers practicing teachers to build community, but to really also talk about what kinds of skills are needed to negotiate higher education—what kinds of cultural things Native folks really considered to be important to hold onto as they negotiate education so that doesn't get lost."*

The program supports recruitment by modeling the pathway from student to educator and sharing stories about "becoming educators so that participants can see all the different ways and all the different pathways there are to becoming teachers." The program is intentionally multigenerational with individuals at various stages, and participants are encouraged to invite family members and supporters. The program also supports retention among practicing teachers as they build community and learn from one another.

Recommendations for recruiting and retaining Indigenous educators through GYOs

Recommendations for Tribes

Successful GYO programs for Indigenous students rely on strong, responsive relationships between Tribes, districts/schools, and TEPs. Tribes can support the development or expansion of GYOs in a variety of ways, including the following strategies:

- Partner with TEPs, schools, and districts to identify spaces for satellite or microcenters for school staff to complete coursework within the community.

- Partner with TEPs, schools, and districts to share information and support high school students with identifying and enrolling in paid internships, summer bridge programs, and cohort-based TEPs.

- Partner with TEPs, schools, and districts to identify opportunities for engaging community members and cultural practitioners in educational roles.

Recommendations for TEPs

TEPs can implement a variety of strategies to support Native communities and students with successful GYO programs that create opportunities for high school students, classified staff, and cultural practitioners to work as educators and in educational leadership roles. Some recommendations for TEPs include:

- Identify opportunities for students with current or previous experience in an educational setting to receive credit for work experience and continue to engage in paid work while enrolling in a program.

- Support cultural practitioners with alternative pathways to certification.

- Expand dual enrollment opportunities for high school students, and support students with the transition from high school to college through summer bridge programs.

Recommendations for schools and districts

Schools and districts play a central role in recruiting members of the community into GYO programs, supporting their successful completion of such programs, and facilitating their transition into the workforce. Recommendations for schools and districts include:

- Support classified staff and cultural practitioners with obtaining teaching credentials by sharing information about educational opportunities, offering financial support, partnering with TEPs to offer programs in students' home communities, and providing alternative pathways to certification.

- Support Indigenous high school students by offering dual enrollment in educator programs and opportunities for paid internships in educational settings, and by partnering with TEPs to provide learning communities and cohort models that support students as they transition from high school to college.

Recommendations for regional and state agencies

As in Chapter 2, the recommendations for Tribes, TEPs, schools, and districts rely on the support and system-level changes within regional and state entities including

ESDs, OSPI, WSAC, SBCTC, WACTE, PESB, and others. Recommendations for regional and state agencies include:

- Incentivize and support TEPs in creating programs accessible for Indigenous staff working in districts, including programs that allow staff to continue working while they are enrolled and flexible, streamlined programs to support cultural practitioners with obtaining teaching credentials specific to their area of expertise.

- Identify funding and space for micro centers and satellite programs to support students pursuing education in their home communities.

- Identify or create funding opportunities for high school students to participate in paid internships and dual enrollment programs.

Chapter 4. Recruiting and retaining Indigenous educators in schools and districts

This chapter highlights promising practices, innovative strategies, and solutions to challenges faced by schools and districts working to recruit and retain Indigenous educators. It begins with a description of strategies districts are using to center Indigenous culture and the value of this strategy in recruiting and retaining Indigenous educators. This is followed by a description of the leadership structures and climate districts can create to attract and keep Indigenous educators and strategies schools and districts are using to support Indigenous educators in their transition into the workforce. This chapter closes with recommendations for Tribes, TEPs, regional and state agencies in their work to recruit and retain Indigenous educators in schools and districts.

Centering Indigenous culture can help with Indigenous educator recruitment and retention

In alignment with the GYO approaches described above, districts are eager to hire people who are part of the community. Participants shared that recruiting locally also tends to support retention, as a faculty member at the Lakehead University Indigenous TEP said, "The more you can recruit locally, I think it'll have a long-term impact because you're going to tend to keep them; you know they're not going to move." In addition, Indigenous educators can have a profound impact on students. One participant described why this is important, saying,

> *"It's important to get good role models for kids in the classroom and people that they know and maybe have had similar experiences. It's basically helping our young people understand where they come from, who they are, and being able to be good role models for students in our community."*

Centering Indigenous education philosophy in recruitment

Because the pool of Indigenous educators is small, districts shared additional strategies they use to attract candidates to their open positions. Because Indigenous candidates have numerous options, one participant said that a major leverage point for recruitment (other than compensation) is sharing an Indigenous education philosophy and components of the school and demonstrating support for the educator. Some districts do this by creating a website that highlights Indigenous staff and their shared stories. Others share information about how the school centers Indigenous culture and highlight their values on their outreach materials, including signs, pamphlets, and brochures. They describe this approach as a part of "[making] sure that we show the culture and the heart of our school."

One district requires that an Indigenous educator be on every interview panel. This is a signal to the candidates and an important screening step to ensure that each new hire will be a good fit with the culture of the district. One participant described this approach as follows,

> *"On every interview process, we always have an Indigenous person on that panel, because we have to be sure that whoever's being hired, it is well received by the community at large, and so we have a representative at each and every one of the interviews and that's a requirement."*

Participants across districts shared the importance of word-of-mouth and building their reputation for supporting Indigenous educators. One district was leveraging this strategy through encouraging a recent hire from a TEP for Indigenous educators to reach out to other students from the program about openings in the district.

Indigenous curriculum and in-school events

Participants in districts described many ways they can center and celebrate Indigenous culture through their curriculum. This approach supports Indigenous students and educators by fostering a sense of belonging and purpose. Some districts have built seasonal calendars so the school calendar aligns with historical seasonal rounds. Educators can align their lessons with those practices, and they create a frame for passing down language and culture. Other districts described how they bring in elders; as one participant described,

"If we're talking about king salmon days, ... our elders can tell that story, and then, our teachers have something to hook their curriculum and their stories to ... we're really working to try to bring the elders back into the school."

A faculty member at the Lakehead University Indigenous TEP described how a district they work with supports partnerships with local communities through an annual event that highlights Indigenous culture and "opens bridges between the communities and school." One district described how they are developing new programs that include career and technical education (CTE), construction trades, and natural resources programs in alignment with cultural practices. A participant described how these programs engaged teachers in collaboration across disciplines, saying,

"When we look at our CTE programs ... our construction trades teacher is working with our culture teacher and community people on carving. So they're looking at construction methods, but bringing the art components into it, mask making and canoe building and those pieces, and then inviting elders into the shop basically to work with kids on those specific tasks."

One challenge faced by districts as they work to increase their culturally relevant programming is aligning with state-mandated assessments. One participant shared that assessment has slowly replaced the cultural components of the curriculum, and they are now working to foster culturally responsive assessment. This participant described their culturally responsive assessment approach as,

"It's not necessarily about taking a test. A lot of times what it comes down to is, if we're building a canoe, if we're building a mask, what is the story behind that, how did it come to be, what were the skills that took to develop that, and, and knowing who you are and where you come from no matter what race you are."

Supportive administrators and a culturally affirming climate can bolster recruitment and retention

The literature review demonstrated that cultural safety, identity, and belonging are key factors in Indigenous educators' decisions to remain within the workforce (Brown, 2014; Geiger & Pivovarova, 2018; Gist, Bristol, Carver-Thomas, 2021; Grooms, et al., 2021; Landertinger et al., 2021; Trimmer et al., 2018). School districts

can foster culturally safe environments by offering differentiated support for Indigenous educators (Gist, Bristol, Carver-Thomas, 2021; Landertinger et al., 2021), creating Indigenous-centric curricula and program design and offering professional development and mentorship for Indigenous educators.

Participants shared that many of the strategies used to recruit Indigenous educators and support them with the transition to the workforce also supports retention. In particular, districts highlighted the importance of competitive pay scales, sufficient staffing and supports for staff, hiring individuals from the local community, and hiring individuals with credentials that allow them to receive higher pay. In addition to these strategies, districts noted the importance of supportive leadership, an organizational structure that supports continuous improvement, a supportive school community that centers Indigenous culture and values, and access to ongoing learning and professional development.

Livable wage

Participants across interviews agreed that the most important strategy to recruit and retain Indigenous students and educators is a livable wage. Districts were working to equalize pay scales to ensure their teacher salaries were competitive and looking at other compensation strategies to attract applicants. These strategies include bonuses for jobs that are harder to fill, distributed over a set amount of time (e.g., two years) and relocation expenses. As one participant said, "They're going to go where there's a competitive salary, where it's going to be a supportive environment." In addition to compensation, districts employ a host of strategies to recruit Indigenous educators into their open positions.

Supportive leadership

District and TEP participants highlighted characteristics of schools and districts that support the retention of Indigenous educators. These include a clear mission and vision that articulates the needs of Indigenous students, supportive administrators at the district and school level who prioritize the mission and vision, transparency in planning and decision making, a culture of continuous improvement that includes reviewing data and transparent reporting, and communication structures between staff and leadership that avoid a top-down approach.

Participants in districts described how they strive to create an environment where teachers feel valued and part of a community, where problems are addressed quickly. This environment is created across the district and maintained through regular contact between superintendents, principals, and educators, so that every person in every role feels valued and important and part of creating a positive climate. Teachers need supportive administration through which they can raise issues and see those issues are addressed. One participant at a district shared,

> *"[If] you're not hearing anything, silence is not a good thing. You've got to know what's going on, you've got to be able to listen and adapt. … If somebody is going to give you something that feels like a criticism, take that as an honor that you're approachable and able to handle that right."*

Districts also need to ensure there are Indigenous community members in leadership or advisory roles, including as trustees or school board members. As a faculty member at the Lakehead University Indigenous TEP shared,

> *"I'm an Indigenous trustee and I try to help our staff understand what it means to be an Indigenous student in school and the history of that—what it means today and how it's different but not different. So we try to create spaces. That has an impact on your ability to recruit people, because if you interview people that left schools there's certain things they are going to say, like 'they're racist; they don't respect me.' … To be a leader in those kinds of places and go in a direction that systematically seems contrary to the way the system is formed and the values within it, that's very, very difficult."*

Building relationships early with potential candidates

Participants shared that recruiting Indigenous educators requires intentional, proactive work. One district shared that their superintendent does mock interviews with students coming out of colleges who are not yet certified to begin building relationships early. A participant described this approach saying, "He's constantly reflecting and he's making sure that he starts early by building those relationships."

This district described how they identify college and regional job fairs that are likely to have more Indigenous educators. They use these events to make a positive impression; they follow up with potential candidates via email to express interest, share information, and open a line of communication. One district shared how they include freshmen, sophomores, and juniors, who may be attending job fairs to gain experience, in their recruitment efforts. They can collect resumes and begin building

relationships with these Indigenous educators who are earlier in their educational pathway.

They also described how they collect resumes from everyone regardless of current job openings. These resumes form a recruiting file they can use to reach out to individuals and share new openings as they arise. This district described how the job fairs allow them to do initial screening to identify candidates who would be a great fit for the school and community so they can focus intentional efforts on those candidates.

Access to ongoing learning and professional development

Participants shared the importance of providing Indigenous and non-Indigenous educators with access to learning and professional development. Some districts described their work to create an environment that supports connection and shared learning. They host learning communities with coaches who can support staff in trying new strategies and taking risks. Districts also highlighted the importance of providing regular, high-quality paid training built into the school calendar.

Districts and TEPs also saw opportunities to support Indigenous educators by collaborating on trainings on Indigenous culture and culturally responsive teaching. TEP-hosted events could allow former students to remain connected to their school and community and create an opportunity to share cultural knowledge across their current education system. One participant described how TEPs could "[extend] opportunities for further learning so your college becomes a place that they turn to just to be a better teacher even after they graduate."

Districts also highlighted the importance of providing professional development around Indigenous culture for every single staff person on a regular, frequent basis. One district does this weekly starting with singing, drumming, dancing, and history. One participant described the goal of this professional development, saying,

> *"Each and every teacher learns the culture and the perspectives and understands the deeper knowledge... we're going to teach [our staff] all the things [they] need to know to be able to be culturally competent, so that we can retain [Indigenous educators] long term. And then that just begets more people wanting to be here because they want to be around people who are culturally competent."*

Another district participant shared the value of attending a learning community with Tribal superintendents to share strategies and learn from one another, saying,

"In the collaborative groups with Tribal superintendents that I meet with on a Tuesday afternoon, weekly meetings, they're all trying to do that same thing; they can't find people to come in, so they're, you know, trying to build from within and get those local Indigenous people up to speed."

Supporting new Indigenous educators with the transition into the workforce can support retention

Districts can also take an active role in supporting new Indigenous educators with the transition to the workforce. Many districts described mentoring, training, and coaching supports that have been successful in retaining Indigenous educators during the first few years of teaching. One district paired new teachers with master teachers who are experienced and share an Indigenous identity or perspective. These master teachers support new teachers in developing and implementing curriculum that is relevant to Indigenous students. Another district provides mentoring for new teachers in their subject area. This district highlighted the importance of compensating mentors.

Another district shared how they provide new educators with training and support in teaching. One participant shared that new teachers often come out of TEPs with a lot of theory and less experience or modeling around managing students and providing instruction in the classroom. Especially after COVID, new teachers had minimal classroom experience, so they created a system of professional development that armed teachers with concrete strategies. This district begins the year with two weeks of professional development. The first week is for new teachers focused on the curriculum, culture, technology, social and emotional learning, cultural competence, and ensuring that each teacher begins the year with a six-week lesson plan. Then, when the school year starts, there are frequent check-ins with new teachers and additional support, like embedded coaching, as needed. A participant described their approach as,

"If we're having a struggle in an area, we're going to push in ... we're going to invest in that teacher. If that means that we have to pay the company to have a coach come in ... to make sure they understand that complex curriculum, then we're going to do that for them, and so every step of the way just wrapping around them ... with support."

This participant noted that another benefit of GYO programs for paraprofessionals is they are better equipped for these transitions because of their years of experience in the classroom.

Other districts described holding regular learning communities that are optional and designed for teachers who need support; these include specialized content coaches on staff to support new teachers with content and instruction. In addition, one district shared that they support students in completing the process to secure federal loan forgiveness so they do not have educational debt. Districts also pointed to the cost of these supports and noted the importance of stable funding sources to support Indigenous teachers with the workforce transition.

This approach is supported by findings from Tenorio and colleagues (forthcoming, 2022), who studied an American Indian Teacher Program at Portland State University designed to support principal licensure preparation for AIAN teachers. The program includes a Native community of practice "which aims to affirm teachers' Indigenous identity, support their advocacy for Tribal educational sovereignty and nation building, and nurture long-term professional relationships" (Gist, Bristol, Carver-Thomas et al., 2021, p. 63). Analysis of eight years of data and records found that the program boosted teacher retention (Gist, Bristol, Carver-Thomas et al., 2021).

Recommendations for recruiting and retaining Indigenous educators in schools and districts

Recommendations for Tribes

For districts to successfully recruit, support, and retain Indigenous educators, they must promote a culture that centers Indigenous culture. This can only be done through strong, responsive partnerships with Tribes. Some recommendations for Tribes include:

- Participate in formal relationships with schools and districts through school boards or committees to provide input on recruitment, professional development, curricula, and policies that impact Indigenous students, faculty, and staff.

- Support schools and districts with identifying or providing professional development on cultural traditions, histories, and practices from the region.

- Support Indigenous educators across districts with opportunities to connect and build community.

Recommendations for schools and districts

Schools and districts can implement a variety of strategies to recruit and retain Indigenous educators within the workforce. Recommendations for schools and districts include:

- Create a culture of supportive, transparent leadership and continuous improvement centering Indigenous culture and students.

- Center Indigenous culture in the curriculum and partner with Indigenous communities to share cultural knowledge.

- Highlight Indigenous culture, culturally sustaining learning, and their overall supportive environment when engaging with Indigenous teacher candidates.

- Provide Indigenous educators including classified staff and cultural practitioners with a livable wage.

- Expand recruitment efforts and build relationships with Indigenous educators early in their educational pathway.

- Provide Indigenous and non-Indigenous educators with access to ongoing learning and professional development around Indigenous culture and culturally responsive teaching.

- Offer mentoring, coaching, and learning communities to support new educators with the transition into the workforce.

Recommendations for regional and state agencies

Washington state and regional entities, including ESDs, OSPI, WSAC, SBCTC, WACTE, PESB and others can support districts by providing incentives and creating a climate that supports Indigenous educators to advance recruitment and retention efforts. Recommendations for regional and state agencies include:

- Support schools and districts with offering staff and teachers a livable wage.

- Promote, elevate, and track district use of the *Since Time Immemorial* curriculum (Senate Bill 5433), adherence to the Right to Tribal Regalia Act (RCW 28A.600.500), and support of Tribal languages to ensure that Indigenous educators do not bear the sole responsibility of advocating for them within their schools or districts.

- Model and support districts in implementing supportive leadership and a culture of continuous improvement. One strategy the state could implement to foster shared learning at the leadership level is facilitating statewide or regional learning communities for superintendents and principals to discuss new and promising strategies and to share lessons learned.

- Share information about professional development opportunities in Washington and across the country that will be helpful as districts work to improve support for Indigenous students, staff, and educators.

- Ensure that small schools and districts have access to resources that allow them to recruit and retain Indigenous educators with the same pay and support as larger districts. This could include additional funding for travel to recruitment or professional development opportunities or administrative support to allow small districts to pursue grants or funding opportunities that require substantial management, such as tracking, data collection, and reporting.

- Highlight the efforts of Indigenous educators and scholars who are doing important work across the state. As one participant recommended,

"Who are the faces, the educators, that are working long and hard in districts and working to engage families in a more meaningful way? ... In the field of Native education, it's always done in sort of a blanket form. ... But what are the faces of the educators and how can we make them more public so that general population doesn't see us just as an afterthought, or maybe not even that, that we're invisible. ... How can our educational systems do better at highlighting the unique needs and challenges and [increase] representation."

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Wheatley, K., Tulloch, S., & Walton, F. (2015). *We are building a critical voice together: The second Nunavut Master of Education program, 2010–2013.* University of Prince Edward Island.

Whitinui, P., de France, R. C., & McIvor, O., (Eds.). (2018). *Promising practices in Indigenous teacher education.* Springer.

Appendix A. Annotated bibliography

Anthony-Stevens, V., Mahfouz, J., & Bisbee, Y. (2020). Indigenous teacher education is nation building: Reflections of capacity building and capacity strengthening in Idaho. *Journal of School Leadership, 30*(6), 541–564. https://doi.org/10.1177/1052684620951722

This article discusses the efforts of the Indigenous Knowledge for Effective Education Program (IKEEP), at the University of Idaho, a predominately white institution (PWI) of higher education, and its struggle to create space in higher education for intentional support of Indigenous self-determination, sovereignty, and Tribal nation building through the preparation of Indigenous teachers. In doing so, we examine the contentious and local work of reimagining education, from the bottom up and top down, to develop leaders to serve the needs of Indigenous youth and communities through the vehicle of mainstream institutions. With data from a multiyear ethnographic documentation, we examine the experiences of IKEEP program administration, teacher mentors, and students through the conceptual lens of Tribal nation building in higher education. Our findings underscore how teacher education programs at PWIs need to engage in a radical shift toward seeing Indigenous teachers as nation builders and to prioritize the infrastructure and programmatic collaboration to support them and their communities as such.

Apel, H. (2021, September 29). ROOTS program sets sights on preparing Indigenous school leaders. *Nebraska Today.* https://news.unl.edu/newsrooms/today/article/roots-program-sets-sights-on-preparing-indigenous-school-leaders/

For more than 20 years, the Indigenous Roots Teacher Education Program in the University of Nebraska–Lincoln's College of Education and Human Sciences has prepared American Indian students to become elementary education and bilingual teachers working in American Indian-serving school districts in Nebraska. Now a new grant from the U.S. Department of Education will allow the program to expand its efforts and focus on training Indigenous school principals and administrators.

Beaulieu, D., (Ed.). (2006). The power of Native teachers: Language and culture in the classroom. The Center for Indian Education, Arizona State University.

In the introductory chapter to this volume, David Beaulieu, who is the current Principal Investigator of the Native Educators Research Project, shares his unique perspective on the historical and political climate that gave rise to initiatives to increase the numbers of indigenous teachers during the period of time when he served as Director of the U.S. Department of Education's Office of Indian Education

Becket, D. R. (1998). Increasing the number of Latino and Navajo teachers in hard-to-staff schools. *Journal of Teacher Education, 49*(3), 196–205. https://doi.org/10.1177/0022487198049003005

Examined the development of two teacher education programs designed to increase the number of quality minority teachers in Latino neighborhood schools and on the Navajo reservation. Review of teacher education literature and analysis of interviews with program staff, archival records, and program documentation indicated that these two nontraditional programs were of high quality and attracted minority students into teaching. (SM)

Carver-Thomas, D. (2018). Diversifying the teaching profession: How to recruit and retain teachers of color. Learning Policy Institute. https://learningpolicyinstitute.org/product/diversifying-teaching-profession-report

This research review analyzes studies on the recruitment and retention of teachers of color in order to examine the current state of teachers of color in the workforce; understand the factors that affect their recruitment, hiring, and retention; and highlight opportunities for policymakers to grow a stable workforce of teachers of color in their districts and states. The first section of this paper, Racial and Ethnic Diversity in the Teacher Workforce Today, includes a description of the proportion and growth of teachers of color in the workforce based on several national data sources and an analysis of the most recent nationally representative datasets from the U.S. Department of Education Schools and Staffing Survey (SASS) 2011-12 and the SASS Teacher Follow-up Survey (TFS) 2013-14. This section also summarizes recent literature regarding the value to students of a racially diverse teacher workforce, followed by a discussion of the significant role teacher retention plays in shortages of

teachers of color. The second section of this paper, Barriers to Recruiting and Retaining Teachers of Color, summarizes the most recent literature on factors affecting the recruitment, hiring, and retention of teachers of color. Included within this discussion is enrollment in and completion of high-quality TPPs, school closure and turnaround policies, and teaching conditions. Finally, the last section of this paper, Promising Practices, examines the evidence for promising practices aimed at overcoming the common barriers to recruiting, hiring, and retaining teachers of color identified in section two. These practices include funding high-retention pathways into teaching, such as teacher residencies, Grow Your Own programs, and college mentoring and support programs; creating proactive hiring and induction strategies; and improving school teaching conditions through improved school leadership.

Freeman, K. (2008). To remain working for the people: Ojibwe women in an Indigenous teacher education program. *Encounters on Education, 9*, 121–143. https://doi-org.proxy.lib.pdx.edu.org/10.24908/eoe-ese-rse.v9i0.1775

This paper explores the role of relationships for eight Indigenous (Ojibwe) women enrolled in a Canadian teacher education program, specifically, the ways in which relationships pertained to Indigenous culture-creation and continuity through education. Findings from this small study suggest that there is some consistency in the relational orientations and in the roles of Ojibwe women past and present. The paper outlines ways in which study participants are demonstrating cultural continuity in fulfilling roles as learners and as teachers of Indigenous students. It concludes with questions and implications for the design and practice of Indigenous education.

Garcia, A. (2020a). Cultivating Nebraska's Indigenous roots to grow American Indian teachers. EdCentral (blog), *New America*. https://www.newamerica.org/education-policy/edcentral/indigenous-roots/

Housed at the University of Nebraska-Lincoln, ROOTS was launched in 1999 with funding from the U.S. Department of Education Office of English Language Acquisition (OELA) as a career ladder program for paraprofessionals interested in earning their teaching degree. Now in its 20th year, the program also serves the communities of Niobrara, Macy, Santee, Walthill, and Winnebago and has expanded beyond the original career ladder model with funding from the federal Indian Education

Professional Development Grants program. With increasing numbers of American Indian families living and working in Omaha and Lincoln, the program has also begun to reach students living in larger Nebraska communities.

Garcia, A. (2020b). Grow your own teachers: A 50-state scan of policies and programs. *New America.* https://www.newamerica.org/education-policy/reports/grow-your-own-teachers/

Over the past four years, New America has been researching Grow Your Own (GYO) programs as a strategy for growing and diversifying the teacher workforce. GYO programs—partnerships between school districts, institutions of higher education, and community-based organizations to recruit and prepare community members to become teachers in local schools—are increasingly popular as a strategy for teacher recruitment and development. Research on GYO suggests that homegrown teachers have higher rates of retention and that these programs remove barriers that have kept some individuals from being able to access and persist in a teacher preparation program. At the same time, states are making efforts to increase the racial and linguistic diversity of the teacher workforce. Given the expanding interest in GYO, the author set out to learn more about these programs across the country. A 50-state scan was conducted to identify GYO programs—including target candidates, types of programs, and their design—and to investigate state policies that support GYO program development, implementation, and sustainability. This brief will highlight our findings to help uncover the current state of GYO programs.

Geiger, T., & Pivovarova, M. (2018). The effects of working conditions on teacher retention, *Teachers and Teaching*, 24(6), 604–625. https://doi.org/10.1080/13540602.2018.1457524

Teacher attrition is one of the driving contributors to the shortage of effective teachers internationally and in the United States. The common factors that spur teachers worldwide to leave the profession include low salaries, quality of teacher preparation programs, overwhelming workload, and poor working conditions. In this study, we analyzed three years of Arizona public schools' teacher retention data and quantitative and qualitative working conditions survey data to understand the relationship between attrition patterns, perceived working conditions at their

schools, and the characteristics of the schools where they were employed. We compared attrition rates in schools with different student demographic compositions and related these differences to working conditions as perceived by teachers in these schools. We found that schools where teachers rated their working conditions as more satisfactory had lower attrition rates and also were schools with higher rates of low-income and/or minority students. These findings support the hypothesis of working conditions being a mediating factor in the interplay between school demographics and teacher attrition. We document patterns of teacher retention rates across schools with different student demographics and discuss implications for policy.

Gist, C. D., Bianco, M., & Lynn, M. (2019). Examining grow your own programs across the teacher development continuum: Mining research on teachers of color and nontraditional educator pipelines. *Journal of Teacher Education, 70*(1), 13–25. https://doi.org/10.1177/0022487118787504

Grow Your Own (GYO) programs are cited in recent policy briefs as viable pathways for increasing the racial/ethnic diversity of teachers, yet recent scholarship on GYO programs is minimal. To address this issue, this article investigates what we know, and do not know, about GYO programs, by examining a range of data sources on different types of GYO program teacher pools (e.g., middle/high school, paraprofessional, community activists/parents mentors) and making sense of findings over a continuum of teacher development (e.g., recruitment, preparation, induction, and retention). Based on a research synthesis within and across GYO program teacher pools, we argue implications for policy, practice, and research that should accompany increased recommendations for expanding GYO models for Teachers of Color.

Gist, C. D., Bristol, T. J., Carver-Thomas, D., Hyler, M. E., & Darling-Hammond, L. (2021). Motivating teachers of color and Indigenous teachers to stay in the field. *Phi Delta Kappan.* https://pdkmembers.org/members_online/publications/archive/pdf/PDK_2021_SpecialIssue/PDK_SpecialIssue_2021_RetentionBrief.pdf

Teachers of color and Indigenous teachers made up 16% of the teaching force in 2000 and 19% in 2019. This modest increase would have been more significant if not for

high (and growing) attrition rates among these teachers. This article from a Kappan Special Report examines why teachers of color and Indigenous teachers leave the profession and what can be done to retain them.

Gist, C. D., Bristol, T. J., Flores, B. B., Herrera, S., & Claeys, L. (2021). Effective mentoring practices for Teachers of Color and Indigenous Teachers. *Phi Delta Kappan.* https://pdkmembers.org/members_online/publications/archive/pdf/PDK_2021_SpecialIssue/PDK_SpecialIssue_2021_MentorshipBrief.pdf

We see growing interest among researchers in testing out and refining mentorship models and processes that make visible the racialized experiences of new Teachers of Color and Indigenous Teachers, putting those experiences on the table for discussion. Further, recent studies have made use of research methods — teacher testimony, storytelling, and counter-narratives — that highlight the importance of listening carefully to what teachers have to say about their experiences. Critical mentoring, these researchers argue, must seek out and learn from diverse perspectives about the challenges new teachers face and the kinds of mentorship they need.

Gist, C. D., Bristol, T. J., Bianco, M., & Goings, R. B. (2021). Finding strategies to bring teachers of Color and Indigenous teachers into the profession. *Phi Delta Kappan.* https://pdkmembers.org/members_online/publications/archive/pdf/PDK_2021_SpecialIssue/PDK_SpecialIssue_2021_RecruitementBrief.pdf

Two important strands of research on the recruitment of Teachers of Color have recently emerged, one focusing on the recruitment of high school students and the other on efforts by schools and districts to recruit college and university students enrolled in preservice teacher education programs. Six recent studies on recruitment, described at greater length in the *Handbook of Research on Teachers of Color and Indigenous Teachers* (Gist & Bristol, forthcoming, 2022), expand the research base in this area.

Grooms, A. A., Mahatmya, D., & Johnson, E. T. (2021). The retention of educators of color amidst institutionalized racism. *Educational Policy, 35*(2), 180–212. https://doi.org/10.1177/0895904820986765

Representing approximately 20% of the workforce, educators of color (EOC) leave the field at a rate 25% higher than their White counterparts. Despite workforce diversification efforts, few studies investigate the psychosocial consequences of navigating racialized school climate as reasons EOC may leave the workforce. This study relies on survey data collected from educators of color (paraprofessionals through superintendents) across the state of Iowa. Applying a critical quantitative research design, we examined factors that link racialized school climate to their job satisfaction and psychological well-being. Findings indicate that a racialized school climate has a significant, direct effect on EOC's race-based stress and professional racial self-efficacy. We argue that solely focusing on the retention of educations of color acts as a distraction from dismantling the institutionalized racism that continues to permeate our school systems.

Hall, L. (2012). The "come and go" syndrome of teachers in remote Indigenous schools: Listening to the perspective of Indigenous teachers about what helps teachers to stay and what makes them go. *Australian Journal of Indigenous Education, 41*(2), 187–195. https://doi.org/10.1017/jie.2012.13

High turnover of teachers in remote Indigenous community schools in the Northern Territory has long been considered a significant contributing factor to low academic outcomes for students in those communities. The average length of stay for a non-Indigenous teacher in a remote school can more easily be measured in months than years. This instability in staffing is largely responsible for the instability experienced by many students in these schools. This 'Come and Go' syndrome holds true for non-Indigenous staff; however, the opposite can often be said of Indigenous staff. Indigenous staff in these schools tend to be the 'Stay and Stay and Stay' teachers. They have often worked in their local community school for decades and have seen literally hundreds of non-Indigenous teachers 'Come and Go'. They have been the ones to provide a semblance of stability and some level of program sustainability in education for the children of their own communities. While there is some qualitative data on the things that improve retention of non-Indigenous teachers in rural and remote schools, it mostly looks at the training and skills development that can be applied to the situation. No one has really ever asked Indigenous teachers for their observations or opinions about what makes teachers stay and what makes them go. This article will draw on conversations from two focus groups of Indigenous teachers from remote schools in Central Australia who were invited to discuss just this question.

Heimbecker, C., Minner, S., & Prater, G. (2000). Community-based Native teacher education programs. *Learn In Beauty*. https://www2.nau.edu/jar/LIB/LIB4.html

This paper describes two exemplary school-based Native teacher education programs offered by Northern Arizona University (NAU) to serve Navajo students and by Lakehead University (Ontario) to serve members of the Nishnabe Nation of northern Ontario. The Reaching American Indian Special/Elementary Educators (RAISE) program is located in Kayenta, Arizona, on the Navajo Reservation. RAISE aims to improve recruitment and retention of special education teachers on the reservation. Each cohort of program participants includes Navajo paraprofessionals employed in Kayenta schools and non-Native students from the NAU campus. Throughout the RAISE program, all participants live on the reservation, work and receive coursework in reservation schools, and get to know each other's culture. The supportive and highly contextualized nature of the program have contributed to high program retention and completion rates. Lakehead University developed its Native Teacher Education Program (NTEP) to meet the need of the Nishnabe Nation for aboriginal teachers fluent in the Nishnabe language and knowledgeable of the culture. NTEP participants are mature adults who are native speakers of Nishnabe and who have extensive classroom experience as aides or uncertified teachers. Instruction is compressed into a very demanding 2 years and delivered primarily via two-way radio to 23 remote communities. Teacher-mentors provide support. The first two program cohorts graduated 40 of their 55 participants.

Landertinger, L., Tessaro, D., & Restoule, J.-P. (2021). "We have to get more teachers to help our kids": Recruitment and retention strategies for teacher education programs to increase the number of indigenous teachers in Canada and abroad. *Journal of Global Education and Research*, *5*(1), 36–53. https://doi.org/10.5038/2577-509x.5.1.1066

This paper discusses the findings of a research study that gathered and analyzed recruitment and retention strategies employed by 50 teacher education programs (TEPs) in Canada, the United States, New Zealand, and Australia to increase the number of Indigenous teachers. It discusses several recruitment and retention strategies that were found to be successful in this regard, highlighting the importance

of facilitating access, eliminating financial barriers, and offering Indigenous-centric programs.

Lansing, D. R. (2014). Preparing teachers to contribute to educational change in Native communities: Navigating safety zones in praxis. *Journal of American Indian Education*, 53(3), 25–41. https://www.jstor.org/stable/43608729

Mainstream colleges and universities purport theories of schooling and child development that powerfully dominate the content, processes, and knowledge shaping how Native students are trained as teachers. Tribal colleges and universities can be viable alternatives to this reality. This article reports on findings from a qualitative inquiry documenting what happens when a Tribal college early childhood education program shifts the paradigm in teacher education by employing the Safety Zone Theory (Lomawaima & McCarty, 2006) as a means for Native student teachers to negotiate opportunities to be responsive to the Native communities they serve. Analysis of data from student questionnaires, student reflections, and observational notes is guided by Lomawaima and McCarty's Safety Zone Theory. Findings suggest early learning centers serving Native children and families are highly complex educational spaces in which novice and experienced teachers must effectively negotiate instructional practices and implement culturally relevant and responsive learning for Tribal children.

Mihesuah, D. A., & Wilson, A. (Eds.). (2004). *Indigenizing the academy: Transforming scholarship and empowering communities*. University of Nebraska Press.

Native American scholars reflect on issues related to academic study by students drawn from the indigenous peoples of America. Topics range from problems of racism and ethnic fraud in academic hiring to how indigenous values and perspectives can be integrated into research methodologies and interpretive theories.

Nunavut Teacher Education Program. (2016). Program information sheet. https://web.archive.org/web/20160304041511/http://aboriginal.cmec.ca/documents/NU-NunavutTeachersEducationProgram.en.pdf

The Nunavut Teacher Education Program (NTEP) is headquartered in Iqaluit with the NTEP itself being offered at the Nunatta (Iqaluit) campus of Nunavut Arctic College. The program provides Inuit students training to become qualified as teachers in Nunavut. The Community Teacher Education Program (CTEP) provides teacher training, following the NTEP curriculum, at the community level outside the program center of Iqaluit. This enables students to stay in their community with the support of their family and the opportunity to do their practica in the school where they will be teaching. This has been a benefit for the students as they get to know the teaching staff who they will work with as colleagues and they also get familiar with the school culture.

Reed, K. (2007). Mentoring American Indian middle school students to consider teaching as a career. *Middle School Journal*, *38*(3), 25–33. https://doi.org/10.1080/00940771.2007.11461580

While there continues to be a high number of teacher candidates persisting in their efforts to become teachers, the numbers tell a different story for American Indian teachers. The National Center for Educational Statistics reported that less than one percent of the teaching force in the United States was American Indian during the 2002 academic year. Responding to the need for increasing the number of American Indian teachers, and recognizing the high dropout rates of American Indian students, the University of South Dakota's School of Education joined with a reservation school in the state to provide a teaching career exploration for American Indian middle school students. The purpose of this article is to describe this mentoring/exploratory project, which took place during the fall of 2004.

Trimmer, K., Ward, R., & Wondunna-Foley, L. (2018). Retention of Indigenous pre-service teachers enrolled in an Australian regional university. *Teaching and Teacher Education*, 76, 58–67. https://doi.org/10.1016/j.tate.2018.08.006

Retention of Indigenous pre-service teachers is critical to increasing the number of Indigenous teachers in Australian schools. The aim of this research was to identify factors impacting on retention within one regional university in Queensland. Using a narrative inquiry research design, interviews were conducted with a purposive sample of Aboriginal students (n = 14) over a two year period. Issues and themes impacting on

decisions to exit prior to completion were identified that are being used to enhance operations within the university as well as broader systemic issues which contribute to higher education evidence and understanding for policy discussion and development.

University of Arizona. (2022). *Indigenous Teacher Education Program.* https://itep.coe.arizona.edu/

The Indigenous Teacher Education Program (ITEP) is a bachelor's degree granting program that was founded in 2016, through a grant from the U.S. Department of Education. Our mission is to increase the number of Indigenous teachers serving Indigenous students, schools, and communities.

University of Saskatchewan. (2018a). *Indian teacher education program.* http://www.usask.ca/education/itep/about-itep/index.php

The Indian Teacher Education Program, College of Education, University of Saskatchewan will celebrate over 40 years of success in Indigenous education. The program was established in 1972-73 as a two and a half-year program leading to a two-year Standard "A" certificate. The program has evolved to a four-year Elementary and Secondary Program leading to a Bachelor of Education degree and a Professional "A" certificate. ITEP continues to meet the mandate of post-secondary education in Saskatchewan for First Nations educators.

Van Gelderen. (2017). 'Growing our own': A 'two way', place-based approach to Indigenous initial teacher education in remote Northern Territory. *Australian and International Journal of Rural Education*, 27(1), 14–28. https://doi.org/10.3316/aeipt.215748

Growing Our Own' is an innovative and unique program for Initial Teacher Education (ITE) in the remote Northern Territory. As a partnership between Catholic Education, Northern Territory (CENT) and Charles Darwin University (CDU), lecturers travel to remote Indigenous communities to deliver unit content to local 'Assistant Teachers' enrolled in the Bachelor of Education: Primary degree. However, it is much more than

an effective scheduling exercise; the program has been intentionally established to function under the 'two way' pedagogy whereby the pre-service teachers, their mentors and lecturers engage in a process of epistemological dialogue and exchange. There is also a place-based emphasis, with a clear pattern of teaching 'on country'. Overall, such a process of genuine negotiation to incorporate localised Indigenous Language and Knowledge within the Australian Curriculum is opening up new and exciting possibilities for (school) student learning and a tertiary Indigenous 'standpoint'.

 'Growing Our Own' was established in 2009 and has been refined over the years to meet the increasing demands on Initial Teacher Education and local community desires. This paper is both a report concerning the successes of the program thus far and a critical reflection on some of the key findings that have evolved in regards to such a 'two way', place-based, Indigenous andragogic approach.

Appendix B. Secondary analysis of TEP data

To supplement the literature review, we conducted an analysis of data from Title II of the Higher Education Act[6] to examine enrollment and completion rates of TEPs across the country in the most recent year of data (2018–19 at the time of this report). This analysis focused on two questions:

1. What TEPs had the highest enrollment for AIAN students?

2. What TEPs had the highest completion rates for AIAN students?

TEPs with the highest enrollment of AIAN students

To identify TEPs with the highest enrollment rates of AIAN students, we first sorted the list in descending order based on the column labeled "Indian Enrollment."[7] The 10 programs with the highest AIAN enrollment numbers are presented in table B1; additional details about these programs are provided in table B4. TEPs in table B1 represent six states, with multiple programs in Oklahoma. Only one of the TEPs with high AIAN enrollment is a Tribal college or university, and a majority are traditional

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[6]States annually report key elements of their teacher preparation programs and requirements for initial teacher credentialing under Title II of the Higher Education Act on a state report card designated by the secretary of education. Data are available here: https://title2.ed.gov/Public/DataTools/Tables.aspx

[7] Data technical assistance documentation include the following note on enrollment/completion by race/ethnicity data: For purposes of Title II of the Higher Education Act reporting, states report race/ethnicity data on the number of teacher preparation program enrollees who self-reported in each of seven mutually exclusive categories: Hispanic/Latino of any race, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White, and two or more races. Some individuals choose not to self-report race/ethnicity information, so they are not included in these percentages. Percentages for each racial/ethnicity category were calculated by the total number of self-reported enrollees in each category divided by the sum of enrollees across all racial/ethnicity categories.

programs.[8] Despite their high enrollment rates of AIAN students, in six of the 10 programs less than 10 percent of enrolled students identify as AIAN, and in nine of the 10 less than 10 percent of program completers identify as AIAN.

Table B1. Top 10 TEPs by AIAN student enrollment rate in 2018−19

State	IHE name	Program type	Total enrolled	AIAN enrolled	% enrolled AIAN	% completers AIAN
TX	A+ Texas Teachers	Alt, not IHE	55,807	210	0.4%	0.3%
AZ	Grand Canyon University	Trad	20,914	134	0.6%	0.5%
NC	North Carolina RALCs (Title II only)	Alt, not IHE	5,870	134	2.3%	2.5%
AK	University of Alaska Fairbanks	Trad	364	109	29.9%	6.6%
OK	University of Central Oklahoma	Trad	852	75	8.8%	8.6%
OK	Southeastern Oklahoma State University	Trad	482	57	11.8%	10.0%
SD	Oglala Lakota College*	Trad	59	57	96.6%	83.3%
AZ	University of Phoenix	Trad	7,028	55	0.8%	0.2%
OK	Northeastern State University	Trad	437	50	11.4%	11.8%
OK	Oklahoma State University	Trad	684	47	6.9%	8.2%

*indicates a Tribal college or university

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[8] Traditional teacher preparation providers typically offer undergraduate programs and often attract individuals who enter college with the goal of becoming a teacher.

Source: Authors' analysis of data from the Title II of the Higher Education Act state report cards: https://title2.ed.gov/Public/DataTools/Tables.aspx

We then calculated the percentage of enrolled AIAN students by dividing the number of Indigenous students by the total number of students and sorted in descending order based on the enrollment percentage. The 10 programs with the highest percentage of AIAN students enrolled are presented in table B2 (additional details provided in table D4). Programs in table B2 represent five states with multiple programs in North Dakota, Montana, and South Dakota. All programs are traditional. In contrast to table B1, the programs in table B2 are primarily Tribal colleges or universities, and only one program is in both table B1 and table B2. Nine of these 10 programs have total enrollments less than 50, and more than 50 percent of their students are AIAN. In seven of the eight programs that reported graduation data, more than 50 percent of students identify as AIAN (with two programs suppressing data).

Table B2. Top 10 TEPs by AIAN enrollment percentage in 2018−19

State	IHE name	Program type	Total enrolled	AIAN enrolled	% enrolled AIAN	% completers AIAN
ND	Turtle Mountain Community College*	Trad	21	21	100.0%	100.0%
MT	Stone Child College*	Trad	14	14	100.0%	100.0%
KS	Haskell Indian Nations University*	Trad	13	13	100.0%	100.0%
ND	Sitting Bull College*	Trad	7	7	100.0%	100.0%
ND	Nueta Hidatsa Sahnish College*	Trad	3	3	100.0%	NA
SD	Oglala Lakota College*	Trad	59	57	96.6%	83.3%
ND	United Tribes Technical College*	Trad	9	8	88.9%	NA

SD	Sinte Gleska University*	Trad	21	18	85.7%	75.0%
WI	College of Menominee Nation*	Trad	17	11	64.7%	100.0%
MT	Salish Kootenai College*	Trad	45	19	42.2%	50.0%

*indicates a Tribal college or university

Source: Authors' analysis of data from the Title II of the Higher Education Act state report cards: https://title2.ed.gov/Public/DataTools/Tables.aspx

TEPs with the highest completion rates for Indigenous educators

To identify TEPs with the highest completion rates of AIAN students, we calculated the percentage of completers who identified as AIAN and sorted the list in descending order. The 10 programs with the highest AIAN completion rates are presented in table B3 (additional details provided in table B4). TEPs in table B3 represent seven states, with multiple programs in North Dakota and South Dakota. Six of the TEPs with high AIAN completion rates are Tribal colleges or universities, and a majority are traditional programs.[9] Seven of the 10 programs have more than 50 percent of AIAN students enrolled. Three programs have higher completion rates for AIAN students than enrollment rates, and two programs have lower completion rates for AIAN students than enrollment rates (four programs enroll and graduate 100% AIAN students).

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[9] Traditional providers are defined as follows: Traditional teacher preparation providers typically offer undergraduate programs and often attract individuals who enter college with the goal of becoming a teacher. Alternative, not IHE-based providers are defined as follows: Alternative teacher preparation providers often serve candidates who are the teacher of record in a classroom while participating in the program, often attracting candidates who already hold a bachelor's degree in a specific content area and may have prior work experience but are seeking to switch careers. Alternative routes to a teaching credential are defined as such by the state and vary by state. Alternative, not IHE-based providers are offered by a variety of organizations, including states, nonprofits, for-profit entities, districts, and various partnerships.

Table B3. Top 10 TEPs by percent of AIAN completers in 2018−19

State	IHE name	Program type	Total enrolled	AIAN enrolled	% enrolled AIAN	% completers AIAN
ND	Turtle Mountain Community College*	Trad	21	21	100.0%	100.0%
MT	Stone Child College*	Trad	14	14	100.0%	100.0%
KS	Haskell Indian Nations University*	Trad	13	13	100.0%	100.0%
ND	Sitting Bull College*	Trad	7	7	100.0%	100.0%
WI	College of Menominee Nation*	Trad	17	11	64.7%	100.0%
SD	Oglala Lakota College*	Trad	59	57	96.6%	83.3%
SD	Sinte Gleska University*	Trad	21	18	85.7%	75.0%
MT	Salish Kootenai College*	Trad	45	19	42.2%	50.0%
GA	Chattahoochee-Flint RESA	Alt, not IHE	61	1	1.6%	50.0%
CA	Claremont Graduate University	Trad	33	8	24.2%	23.1%

*indicates a Tribal college or university

Source: Authors' analysis of data from the Title II of the Higher Education Act state report cards: https://title2.ed.gov/Public/DataTools/Tables.aspx

TEPs were also required to describe their institution's most successful strategies in responding to the identified needs of local or state education agencies, meeting the needs of schools and instructional decisions new teachers face in the classroom, ensuring prospective special education teachers are prepared in core academic subjects, ensuring prospective general education teachers are prepared to provide instruction to students with disabilities, limited English proficient students, and students from low-income families, and ensuring prospective teachers are prepared to effectively teach in urban and rural schools. Many of the TEPs in tables B1-3

describes strategies they used to support AIAN teachers. These strategies are included in table B4.

Table B4. TEPs' most successful strategies (2018–19 reports)

State	IHE name	Table	Strategies
TX	A+ Texas Teachers	B1	n/a
AZ	Grand Canyon University	B1	All Grand Canyon University teacher preparation programs are designed with the requirement that learners complete a Benchmark that measures scaffolded learning throughout each course of a program. These strategically designed assessments are one of the College of Education's most effective strategies to meet the required assurances above. Each measures learner understanding of specific specialized professional association standards related to the program, e.g. the Interstate Teacher Assessment and Support Consortium (InTASC) standards, and the standards of specialized professional associations, and stresses understanding and application of specific standards within coursework. Examples of sample benchmark titles can be found below. In many cases, field experience/practicum hours, the action inquiry process, and/or contact with a variety of stakeholders within the local educational agencies also serve to inform the assessments. The structure of the benchmark and its associated rubric is designed to address a number of components critical to the learner's understanding.
			Prospective teachers respond to identified needs within their local educational agencies (LEA) as they complete field experience/practicum hours, action inquiries, and specific assignments that are linked to the needs of the LEAs in their communities and the instructional decisions teachers face in the classroom. For example, one course includes a wide range of literacy and assessment strategies based on instructional outcomes. Course content is strategically planned to enable prospective teachers to make informed decisions based on data in literacy and language instruction. This particular course, titled Foundational Literacy Skills and Phonics includes reading diagnostics, assessments, and strategies implemented with a single elementary student in a site-based reading lab. When completing the field experience/practicum hours connected to this course, learners are encouraged to reflect their own state content standards in the completion of the benchmark assessment, in addition to the applicable professional standards specifically provided for them to address. Part of the benchmark is a requirement to identify those particular standards.
			In the BS in Elementary Education/ Special Education program, prospective special education teachers receive coursework in core academic subjects, their instruction, and their assessment methods. For example, one such course in this program of study, called Methods and Strategies of Teaching and Integrating Social Studies and the Arts, is designed to train teachers in methods of instruction, unit and daily lesson plan construction, use of literary materials and resources, and development of a coherent, assessment-based, data-driven program fostering social studies in the classroom. A second example can be found

in a course called Methods and Strategies of Teaching and Integrating Science and Health in which learners are involved in the formulation of programs for the individual child to teach the theory, practice, and assessment of elementary health and science. The student is involved in formulation of programs, planning instruction, employing science and health resources and materials that are currently being used in the public schools, and using instructional models.

In the undergraduate programs, general education teachers receive training in providing instruction to children with disabilities through a survey course of the unique learning needs of exceptional students. The course is called Survey of Special Education: Mild to Moderate Disabilities. Special focus is given to the referral process, appropriate instructional modifications and accommodations for exceptional students, hot topics and trends, and IDEA law. In the graduate programs, the course has the same title but emphasis is placed on definitions, etiology, characteristics, and prevalence of various exceptionalities; laws and litigation protecting the rights of students with special needs and their families; current issues affecting persons with special needs; social perceptions, assessment, inclusion, and transition; and basic curriculum accommodations and supportive services for teaching students with special needs in the general classroom.

General education undergraduate and graduate teachers receive training in providing instruction to limited English proficient students through a course which describes not only the historical, legal, theoretical, and sociological foundations of programs of instruction for these students, but that also study the models, prototypes, and methodologies for ESL instruction. Theoretical principles of language acquisition and the role of culture in learning are examined. Methods of assessment are identified and analyzed. Prospective teachers identify strategies to promote English language development and improve student achievement. They plan, deliver, and evaluate instruction for English language learners. This course is titled Advanced Methodologies of Structured English Immersion. The course is completely aligned with ADE's curricular framework for SEI Endorsement training. Associated course work trains learners in the use of the SIOP instructional method for limited English proficient students.

Because GCU trains prospective classroom educators nationwide, students may complete practicum/field experiences and student teaching in a variety of urban and rural settings. The practicum/field experiences built into most courses and the coursework that accompanies the student teaching experience provides training on how to effectively teach in these environments. This is accomplished through learner/ instructor interaction in reflections surrounding analysis of curriculum trends, issues, implementation observations, etc, as the learner observes in the classroom. Additionally, learners complete a practicum diversity form that records their experiences in these settings, which is maintained in the institutions Document Management System (DMS).

General education teachers receive training in providing instruction to children from low-income families through the requirements of many

			courses' field experience/practicum hours to be completed in Title I schools.
NC	North Carolina RALCs	B1	The Regional Alternative Licensing Center requires both General Education Pedagogy and specific subject area content coursework. Program requirements for teacher candidates completing their Regional Alternative Licensing Center programs for professional educator licensing are dictated by the North Carolina State Board of Education policy and aligned with the 21st Century Teaching Standards for all North Carolina teachers, including but not limited to those categorized above.
AK	University of Alaska Fairbanks	B1	- Close formal and informal collaboration with teachers and administrators in PK-12 Alaska schools regarding curriculum review and refinement, internship structure and assessment, and creation and implementation of special cohorts. - Emphasis on differentiated learning both in specific courses and integrated in all courses throughout curriculum. - Focus on culturally responsive and place-based learning throughout the curriculum. - Practicum/fieldwork and year-long internship experiences in multiple and diverse settings. - Opportunities for rural experiences for urban students. - High quality, student-instructor delivery of distance courses.
OK	University of Central Oklahoma	B1	Since SY 2009-10 we have continued to recruit approximately 10-15 new teacher candidates each year into the Urban Teacher Preparation Academy (UTPA) serving Oklahoma City Public Schools (OKCPS). Currently, the Academy is operated in collaboration with the district and the Foundation for OKCPS. The Academy includes pre-internship professional development (1 semester) associated with the challenges common for students and teachers in urban settings, multiple clinical experiences prior to the internship, 16 weeks of student teaching and three years of professional development and induction support. UCO has provided close to 120 teachers to the Academy network that, at times, has been a consortium with the Oklahoma State University (OSU), the University of Oklahoma (OU), and Mid-America Christian University (MACU). Additionally, we have partnered with the Foundation of OKCPS to create a Bilingual Paraprofessional Pipeline and Diversity Pipeline to assist current teachers assistants in OKCPS to gain teacher certification.
OK	Southeastern Oklahoma State University	B1	The teacher education program continues to work with our area high schools to recruit mathematics education and special education majors.
SD	Oglala Lakota College*	B1, B2, B3	* A teacher vacancy survey for special education teacher needs on the Pine Ridge Indian Reservation and Cheyenne River Indian Reservations has been conducted. * Praxis preparation sessions were offered to assist teacher candidates in preparing for the content area and pedagogy exams required for licensing in South Dakota.

* Special education endorsement in South Dakota requires preparation in the core content areas or verification of core content knowledge through Praxis examination.

* All teacher preparation programs of study at Oglala Lakota College include ExEd 313 Introduction to Exceptional Education. In addition, meeting the unique needs of students who have disabilities is integrated into the professional and professional core courses.

* Instructional strategies to address the needs of students who are limited English proficient are integrated into the professional and professional core courses in each of the teacher preparation degree programs.

* Instructional strategies to address the needs of students who come from low-income families are integrated into the professional and professional core courses in each of the teacher preparation degree programs.

* Graduates of the teacher preparation program are prepared to teach in rural reservation district communities, small towns and larger cities in the local area.

* School administrators are contacted each year to conduct performance surveys of the 1st and 5-year graduates of our programs.

| AZ | University of Phoenix | B1 | University of Phoenix's College of Education implements strategies at the program level, as well as at the course level, to successfully meet the assurances listed above. The College builds its programs on research conducted by its Academic Affairs staff and by campuses concerning state and national standards, current policies, and national/state/local trends, issues, and needs. College Academic Affairs staff are in continuous communication with state education officials, campus administrators, and faculty members to address the implications of policies, trends, and issues for new programs, or for revision of programs and courses. |

The College believes that it has professional accountability to its candidates and to the students whose lives they impact. Candidates learn from experienced practitioners who are knowledgeable about research, issues, and best practices in the field. In addition, the College is committed to preparing teachers for a diverse community of students. Candidates are supported in designing, implementing, and reflecting on effective instruction to meet student needs.

The College offers dedicated courses that address diverse learners, and threads instruction of diverse learners throughout its courses in content, assignments, and field experiences. In field experiences and in student teaching, selecting and teaching in varied demographic settings is emphasized.

To ensure relevance and currency of its programs and courses, the College continuously gathers and analyzes program and course level data about candidates' educational experiences and utilizes the results for program re-design and revision, faculty development, and the

			mentoring and counseling of candidates. Data may be obtained from course-based assessments, field experience and clinical practice evaluations, grade point averages, professional/state-mandated examination scores, and candidate self-assessments. This assessment process encourages the development of innovative academic programs that provide candidates with the knowledge, skills, and dispositions to meet student needs.
OK	Northeastern State University	B1	Northeastern State University is fortunate to operate in locations that provide teacher candidates opportunities to practice in local area schools which serve families from a variety of backgrounds, ethnicity, social economic statuses, English language learners, and children with varying needs and abilities. Clinical placement decisions are based upon student characteristics including ethnicity of the population, mobility rates, percentage of children requiring free/reduced lunch, percentage of children requiring special education services, and percentage of English Language Learners. We continue to evaluate our curriculum to reflect the needs of school partners. Stakeholders are given opportunities for input and inclusion in the decision-making process for teacher education every fall, spring, and summer semesters. Many unique partnerships between NSU and local area school districts are currently being developed or are already in place to address the teacher shortage in the state of Oklahoma. We have programs in place to give teacher candidates a variety of internship opportunities (i.e. rural, urban, international, yearlong).
OK	Oklahoma State University	B1	We have remained committed to ensuring all candidates are placed in clinical experiences in both urban and rural settings, as well as a variety of socio-economic settings. Every candidate in addition to their special education course considers accommodations and modifications for learners with special needs in each methods course. We communicate frequently with our partner districts for placements, as well as districts that hire our completers in order to ensure we are addressing the needs of the field, both in terms of preparation and in our recruitment efforts.

For addressing the needs of English language learners, we have threaded through our methods courses strategies to support English learners' needs. Multiple programs have added a specific course on serving emergent bilingual students with others considering this change as well. |
| ND | Turtle Mountain Community College* | B2, B3 | Guest presenters are routinely scheduled to speak to candidates in the appropriate courses (multicultural, education assessment, etc.) to share unique needs of subgroups found in most school environments and educated in how to use data to meet unique needs of individual students. When schedules and funding permit, students travel to area school to observe. We also have a collaborative agreement with Mayville University, our diversity sister school, and students from each visit the other campus to participate in diversity events. Diversity events include presentations provided by ND area education cooperatives with an emphasis on the NDMTSS (North Dakota Multi-Tiered Support System). NDMTSS addresses a wide range of learner differences and needs. |
| MT | Stone Child College* | B2, B3 | Students are also required to participate, as a group, in a 10-hour field experience providing an opportunity to observe multiple teachers providing instruction to a diverse student population, not just multi-culturally, but also in learning exceptionalities. Stone Child College students will participate in a field trip to the Montana School of the Deaf and Blind (MSDB) in Great Falls. Students prepare lessons to present to |

the children at the school about the seven Indian Tribes of Montana, adding not only to their understanding about the great diversity among the American Indians in Montana, but also giving the children at the MSDB some insights about the great diversity among Tribal cultures, traditions, and languages within the Tribes located in Montana. During a tour of the school, students have the opportunity to see many teachers using multiple methods of providing instruction to a multitude of children with exceptional learning needs

Conceptual Framework Summary/Guiding Principles: To guide its work in teacher preparation, the Department has delineated the following Guiding Principles as the essential elements of effective educator preparation;

1) All learning begins with a focus on the learner and the learning process; one must know the previous experiences, cultures, languages, learning needs, and backgrounds of each learner in order to effectively create student-centered, engaging, and supportive learning environments and opportunities.

2) Program content is essential in the preparation of successful K-8 pre-service teachers; the SCC Education Department provides a broad educational foundation with a focus on how science, technology, and math interconnect within the language arts, social studies, creative arts, and health enhancement curricula.

3) To be effective and compassionate educators, pre-service teachers must develop the scholarly ability needed in the elementary classroom. Moreover, prospective teachers must secure: a) knowledge and deep understanding of the process of human development and behavior; b) competence in the techniques of instruction and assessment; c) knowledge of school organization and administration; d) an understanding of education as a social institution in historical, social justice, and philosophical

perspectives; e) experience in culturally diverse settings; and f) an ability to work with diverse groups of learners.

4) Professional responsibilities for teachers include: a) the ability to continue to grow professionally; b) the ability and dispositions to engage in collaboration with multiple stakeholders including families, community members, and other professionals; and c) the ability to evaluate and reflect upon the outcomes of one's teaching using a variety of data from multiple sources to best meet the needs of all learners.

5) Faculty and Department Head meet each semester with our Advisory Board, which is made up of principals from three schools and supervisory teachers from 3 schools, to discuss local needs, issues and concerns. Two of the schools are primarily low-income, as are the student teachers.

6) Differentiation and culture integration is required for all lesson plans and the department has designated several templates for creating lesson plans. In addition, the number of lesson plans required during their methodology courses has increased and the faculty have participated in

			discussion and creation of a rubric to grade lesson plans so that everyone knows the expectations and that students are graded fairly.
KS	Haskell Indian Nations University *	B2, B3	1)Local Agency and State Needs - Our teacher candidates are prepared to work locally in Kansas, as well as other states seeking elementary education teachers. Our teacher candidates are even able to transition to Tribal schools in their own communities. Their preparation at our university is of high quality and rigor to meet the demands of CCSS, legislation and characteristics of students they encounter.

2)Needs of the schools - Our candidates are thoroughly prepared to meet the needs of schools and curriculum as they learn best practices and current curriculum from instructors, workshops and training sessions.

3)Special Education Teachers - NA as we do not prepare special education teachers.

4) Providing instruction to children with disabilities - Candidates thoroughly examine the state and federal laws (P.L. 94-142, Section 504 and ADA). Every principle is presented and tested in each law. Candidates are required to role play an IEP meeting and create a mock IEP document. Candidates create and present a task analysis lesson focusing on one adaptive skill for a student with moderate mental retardation. In standards based lesson plans, candidates are required to differentiate their lessons for all ranges of abilities. For example, dyslexia, vision impairment, behavioral disorder and gifted and talented students. Candidate are also practicing various co-teaching models the classroom as their instructors also model co-teaching in the classroom.

5) Providing instruction to limited English proficient students - Candidates examine guidelines for working with ELLs, read classroom scenarios and reflect on those stories to spark discussion of effective problem solving solutions for the classroom. Classroom discussions are integrated with the textbook outline. A sampling of discussion questions are listed - How do I assess a student's English?, How do I get my reluctant speakers to speak English?, How do I teach grade level content to English beginners? and How do I help students build learning strategies? Candidates also observe an ELL classroom and interact with the ELL teacher.

6) Providing instruction to children from low-income families - Candidates reflect and respond to various real classroom scenarios. Candidates examine and explore solutions for children who have experienced poverty or whose learning may be effected by socio-economic status.

7) Urban and rural schools - Candidates engage in group dialogue sessions after reading articles dealing with urban and rural education topics. The groups then share those discussions with the class. There are many times when candidates expand their knowledge by providing insight into their own urban or rural school experience. |

			The strength of meeting these assurances lie in our field and clinical experiences. Our candidates are placed in school settings where most of these characteristics are present in the school and community. Candidates observe veteran teacher interactions with students and eventually experience those interactions when in the student teaching role. Candidates also assume the responsibilities and duties of their cooperating teacher during the student teaching semester, which means they attend all meetings regarding professional development and student issues such as SIT meetings, IEP meetings, parent/teacher conferences, etc. This provides candidates with multiple opportunities to work with children from various backgrounds and abilities.
ND	Sitting Bull College*	B2, B3	Sitting Bull College collaborates with all nine local schools to offer an inservice each fall. All local teachers are required to attend this professional development opportunity. The conference is tailored to meet the immediate and long term needs of local schools, and includes numerous breakout sessions. This also builds a sense of shared mission and common goals, and keeps Sitting Bull College "in the know" when it comes to our teacher candidates' needs. Through collaboration with the Standing Rock Education Consortium the college offers classes in multicultural education and Native American studies to help out of state teachers become certified. Additionally, Sitting Bull College offers culturally relevant lessons in every course we offer. This has been VERY successful in recruiting, retaining, and motivating students. We feel that the literature supports this type of inclusive environment.
ND	Nueta Hidatsa Sahnish College*	B2	We continue to play an active role in the community by reaching out to the k-12 school districts, by providing training to k-12 teachers and our teacher candidates participating in k-12 training and community events. In addition, aspiring teacher candidates participate in regular seminars and classes, focusing on their strengths and needs as well as successful, research-based teaching strategies. Integration of Common Core Curricula, backward mapping through Understanding by Design planning, and a critical review of planning and instruction utilizing our college's Core Merits which include culture, technology, diversity, and constructivism are key components intrinsic to our standards-based, Teacher Education Program. Teacher candidates write differentiated lessons adhering to a rubric that covers critical issues, concepts, and skills to maximize student achievement in diversified populations.
ND	United Tribes Technical College*	B2	These assurances are in place within the program design and are included in coursework and field placements.
SD	Sinte Gleska University*	B2, B3	The institution works in close partnership with area school administrators to address needs that they may have in preparing future teachers and for professional development for current staff. Surveys are sent to local administrators to obtain data on how well our graduates perform in meeting the needs of children with disabilities, those who live in poverty, and those who may have limited English proficiency. Results from that survey are used to make instructional decisions for our programs. The impact of poverty is studied in a variety of classes; however, it is also stressed that just because children come from low-income families does not mean that expectations should be lowered. The education department completed a thorough program review process during this academic year.

WI	College of Menominee Nation*	B2, B3	In order to meet the needs of American Indian students on and near the reservations in NE Wisconsin, CMN infuses aspects of culture in all coursework. In addition, we require two mathematics and science courses (with a lab) and focus on traditional science. We have increased special education coursework from 3 to 7 credits. We also require field experience in schools with significant numbers of American Indian students.
MT	Salish Kootenai College*	B2, B3	The SKC Division of Education provides coursework, field experience, and assessments to address learning outcomes in working with students from various cultural backgrounds, learning abilities, and socio-economic groups. Our teacher candidates complete a course, Cultures, Diversity and Educational Ethics that includes topics on working in rural schools, teaching students from low-income families, and students who have limited English proficiency. We have an advisory board that keeps our program connected to the LEA's. These connections are important for our teacher candidates to gain hands-on experiences in working with diverse groups of children on the Flathead Reservation. Additionally, students participate in a field experience at the Montana School for the Deaf and Blind for structured fieldwork with diverse learners. As was stated above, over the past two years, Flathead Reservation Educators Support Hub (FRESH), an induction group, brings together new teachers and mentor teachers across the Flathead Reservation. Student teachers are invited to attend so that they were able to meet teachers and administrators from area schools and learn from the discussion groups that include topics such as a) balancing work and home; b) culturally responsive teaching; and c) working with families and community. This group also provides insight for the student teachers' action research projects that serve as capstone projects to their program completion. New candidates gain first hand knowledge from a wider circle of professionals with their involvement in this group.
GA	Chattahoochee-Flint RESA	B3	Candidates are required to attend 12 hours of instruction about "Teaching the Whole Child" and "Classroom Discourse with a consultant from a non-profit organization, 12 hours of training with certified trainers of the Ruby Payne "Framework for Understanding Poverty", and 12 hours with certified trainers in "Youth Mental Health First Aid".
CA	Claremont Graduate University	B3	We work closely with our advisory council to ensure our program meets the needs of our surrounding districts. We have added enrollment numbers in mathematics and science through targeted fellowships to meet surrounding needs. We have been less successful recruiting additional special education candidates and are developing plans in this area. CGU Teacher Education has been preparing all candidates to work with low-income, diverse populations, including English Learners since 1992. We equip our candidates with successful research-based strategies and help them develop positive attitudes relating to students' potential and their own ability, as teachers, to impact student performance. Our graduates know that if they work hard, plan instruction based on student needs, and use performance data to modify their instruction, they can make a difference in each student's life.

As a close-knit cohort program, our general education and education specialist candidates take methods courses side by side. This strengthens the general education candidates' exposure to strategies utilized to work with students with special needs as well as education specialist candidates' ability to provide strong core content instruction. We have also increased content coverage and content specific pedagogy in all 3 core phases of the program, Pre-Residency, Residency, and Post-Residency. Most recently, we replaced a more general educational theory course (Teaching/Learning Process IV) with an advanced content and pedagogy course. As the final credential course taken in the program, our intent was to focus on learning theory as it specifically relates to each core content area. For example, our advanced content and pedagogy course in science will be co-taught by Claremont Colleges STEM and Education faculty to help students reflect on their pedagogical practice in light of content specific learning theory, their previous years residency teaching, and their own analysis of their strengths and weaknesses based on the California Teaching Performance Expectations.

We have several successful strategies to ensure our candidates are well prepared to address the needs of their students. Students complete a modified ethnographic narrative project throughout their program to examine how differentiated instruction for struggling learners, based on knowing students academic and personal history, can make a difference in academic achievement. This project significantly impacts candidates' attitudes and academic expectations for diverse learners. Students are required to select five students to study in their first year of teaching including at least one EL student and one student with special needs. They analyze the students' academic background, interview the students, interview the parents, and then implement modified instructional plans to increase academic achievement. Results are analyzed in the final semester of teaching and the experience is reflected upon as it impacts their own philosophy of teaching.

*indicates a Tribal college or university

Source: Title II of the Higher Education Act state report cards: https://title2.ed.gov/Public/DataTools/Tables.aspx

Appendix C. Interview protocol

Interview Questions

1. Please tell us about yourself and your current role. (For example, organization, position, length of time in current position)

[select from the three sets of questions based on role and expertise]

TEP faculty, staff, and administrators:

2. What is your approach to recruiting Indigenous students into your program?
    a. What challenges have made it difficult to recruit Indigenous students?
    b. What strategies work well to address these challenges? (*Probe: strategies with individual students, and broad programs or initiatives*)
3. What is your approach to supporting and retaining Indigenous students in your program?
    a. What challenges have made retention difficult?
    b. *What strategies work well to address these challenges? (Probe: strategies with individual students, and broad programs or initiatives)*
4. What is your approach to supporting Indigenous students with the transition to the workforce? (*Probe on Indigenous students with different goals: administrators, paraeducators, educational staff)*
    a. Where do most of your Indigenous students go? (*Probe: geographically, what kinds of schools, what kinds of roles)*
    b. What supports would help with the transition into the workforce?
    c. *What recommendations do you have for other programs that are working to improve practices for recruiting and retaining Indigenous students, and supporting their transition into the workforce?*
5. What resources are needed to successfully recruit, retain, and support Indigenous students?

TEP experts or scholars identified in the literature review:

2. What can TEPs do to successfully recruit Indigenous students?
    a. What challenges to students and programs face with recruitment?
    b. *What strategies work well to address these challenges? (Probe: strategies with individual students, and broad programs or initiatives)*
3. What can TEPs do to successfully retain Indigenous students?
    a. What challenges do students and programs face that impact retention?

b. What strategies work well to address these challenges? *(Probe: strategies with individual students, and broad programs or initiatives)*

4. What can TEPs do to successfully place Indigenous students and support their transition into the workforce?
   a. What are challenges that students and districts/schools face in transition and placement?
   b. What strategies work well to support students' transitions? *(Probe: strategies with individual students, and broad programs or initiatives)*
   c. Who is doing a good job in this area?

5. What resources or supports are needed to help with recruitment and retention of Indigenous educators in teacher preparation programs?

Workforce experts:

2. What can schools and districts do to recruit Indigenous educators into the field of teaching?
   a. What are some challenges with recruitment?
   b. What strategies work well to address these challenges? *(Probe: strategies with individual students, and broad programs or initiatives)*

3. What can schools and districts do to support Indigenous educators as they transition into the workforce?
   a. What are some challenges with the transition?
   b. What strategies work well to address these challenges? *(Probe: strategies with individual students, and broad programs or initiatives)*

4. What can schools and districts do to successfully retain Indigenous educators in the workforce? *(Probe on Indigenous educators in different roles: administrators, paraeducators, educational staff)*
   a. What challenges do students and programs face that impact retention?
   b. What strategies work well to address these challenges? *(Probe: strategies with individual students, and broad programs or initiatives)*
   c. Who is doing a good job in this area?

5. What resources or supports are needed to help with recruitment and retention of Indigenous educators in teacher preparation programs?

Close

6. Is there a person or organization you think we should talk to about recruiting and retaining Indigenous educators?
7. Is there anything else you would like to share?

Appendix D. Interview participants

We compiled a list of 28 potential interviewees using findings from the literature review, secondary analysis, and expertise within our team and the Region 16 Comprehensive Center. We then reached out to 21 of those interviewees. We received responses from seven individuals who referred us to three additional interview participants. The list of interview participants is provided in table D1.

Table D1. Interview participants for the Landscape Analysis of Systems and Supports to Develop Indigenous Educators

Program/Organization type	Rationale for selection	Location	Number of interviewees
Indigenous-specific TEPs within a college	Literature review, Team/ R16CC recommendations	Alaska, Oregon, Canada	3
State-Tribal Education Compact school districts	Team/R16CC recommendation, Interviewee referral	Washington	4
Tribal college TEPs	Secondary analysis	Montana	1
Indigenous-specific GYO programs within a TEP	Literature review, Interviewee referral	Pacific Northwest	1
Organizations that support Indigenous educators and Tribal colleges	Team/R16CC recommendation	Nationwide (U.S.)	1

Source: Authors' analysis of interview data